# CONSTRUCTION PERMIT and MINOR SOURCE OPERATING PERMIT OFFICE OF AIR MANAGEMENT

# Delta Faucet Company 1425 West Main Street Greensburg, Indiana 47240

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, (326 IAC 2-5.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 031-11706-00007	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

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D.7.6 Monitoring to Demonstrate Continuous Compliance [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)] [40 CFR 63.343(c)(5) & (7)]

## Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

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# **Malfunction Report**

**Annual Notification** 

Natural Gas Fired Boiler Certification

Chromium Electroplating NESHAP Ongoing Compliance Status Report

#### **SECTION A**

#### **SOURCE SUMMARY**

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

# A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary chrome faucet electroplating source.

Authorized Individual: Russell Parks

Source Address: 1425 West Main Street, Greensburg, Indiana 47240

Mailing Address: P.O. Box 47, Greensburg, Indiana 47240

Phone Number: 812 - 663 - 4433

SIC Code: 3432 County Location: Decatur

County Status: Attainment for all criteria pollutants
Source Status: Minor Source Operating Permit
Minor Source under RSD Bules:

Minor Source, under PSD Rules;

Minor Source, Section 112 of the Clean Air Act

# A.2 Emissions units and Pollution Control Equipment Summary

This stationary source is approved to construct and operate the following emissions units and pollution control devices:

- (a) One (1) decorative chromium electroplating tank, identified as T27, constructed prior to December 16, 1993, using a hexavalent chromium bath, equipped with a packed-bed scrubber, using a chemical fume suppressant containing a wetting agent for control and exhausting at stack 1038Cr.
- (b) One (1) decorative chromium electroplating tank, identified as T23, constructed prior to December 16, 1993, using a hexavalent chromium bath, equipped with a packed-bed scrubber, using a chemical fume suppressant containing a wetting agent for control and exhausting at stack 281Cr.
- (c) One (1) nickel electroplating bath, identified as T23, equipped with a wet scrubber and exhausting at stack 1038Ni.
- (d) One (1) nickel electroplating bath, identified as T18, equipped with a wet scrubber and exhausting at stack 281Ni.
- (e) One (1) copper plating tank, identified as 1038, equipped with a wet scrubber and exhausting at stack 1038Cu.
- (f) One (1) cyanide plating tank, identified as T18, equipped with a wet scrubber and exhausting at stack 574.
- (g) One (1) formaldehyde electroless plating tank, identified as EC Tank T12/T13, equipped with a wet scrubber and exhausting at stack 489.

- (h) One (1) Brite Dip tank, identified as T14, equipped with a wet scrubber and exhausting at stack 1715.
- (i) Two (2) rack strip lines, identified as 255R and 255P, using sulfuric acid and nitric acid, respectively, and equipped with wet scrubbers and exhausting at stacks 255R and 255P, respectively.
- (j) Buffing operations, equipped with three (3) air washers, identified as 2125, 2490 and 3011, and exhausting at stacks 2126, 2491 and 3011, respectively.
- (k) Brazing operations, identified as 10200, exhausting at stacks 1183, 1873, 1874, 1212 and 1105, capacity: 10.3 pounds per hour of solder, 1,800 pounds per hour of brass or copper parts, and 5.72 million British thermal units per hour.
- (I) One (1) cure oven, identified as 569, fired by natural gas and exhausting at stacks 569 North and 569 South, capacity: 3.6 million British thermal units per hour.
- (m) One (1) natural gas fired fluidized bed burn-off oven, rated at 0.99 million British thermal units per hour (mmBtu/hr), with a maximum capacity of 301 pounds per hour of parts and 1.56 pounds per hour of sand, using a cyclone for particulate matter control, and exhausting at one (1) stack identified as 2918.
- (n) One (1) powder spray booth, identified as 1421, equipped with a baghouse and exhausting to stack 1421, capacity: 16 pounds of powder per hour and 1,000 pounds per hour of raw materials.
- (o) One (1) boiler, identified as 1854, constructed in 1993, fired by natural gas and exhausting at stack 1854, capacity: 2.10 million British thermal units per hour.
- (p) Two (2) boilers, identified as 1307 and 1308, constructed in 1987, fired by natural gas and exhausting at stack 1307/1308, capacity: 0.75 million British thermal units per hour, each.
- (q) One (1) boiler, identified as 586, constructed in 1975, fired by natural gas, exhausting at stack 586, capacity: 25.20 million British thermal units per hour.
- (r) One (1) boiler, identified as 1513, constructed in 1990, fired by natural gas, exhausting at stack 1513, capacity: 32.94 million British thermal units per hour.
- (s) One (1) boiler, identified as 2256, constructed in 1994, fired by natural gas, exhausting at stack 2256, capacity: 14.70 million British thermal units per hour.
- (t) One (1) decorative chromium electroplating tank, identified as T21, using a hexavalent chromium bath, equipped with a packed-bed scrubber, using a chemical fume suppressant containing a wetting agent for control and exhausting at stack 253Cr.

# SECTION B GENERAL CONSTRUCTION CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

# B.1 Permit No Defense [IC 13]

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

# B.2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

# B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

# B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

## B.5 Modification to Permit [326 IAC 2]

Notwithstanding the Section B condition entitled "Minor Source Operating Permit", all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

# B.6 Minor Source Operating Permit [326 IAC 2-6.1]

This document shall also become a minor source operating permit pursuant to 326 IAC 2-6.1 when, prior to start of operation, the following requirements are met:

- (a) The attached Affidavit of Construction shall be submitted to the Office of Air Management (OAM), Permit Administration & Development Section.
  - (1) If the Affidavit of Construction verifies that the facilities covered in this Construction Permit were constructed as proposed in the application, then the facilities may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.
  - (2) If the Affidavit of Construction does not verify that the facilities covered in this Construction Permit were constructed as proposed in the application, then the Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section prior to beginning operation of the facilities.
- (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (c) Upon receipt of the Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section, the Permittee shall attach it to this document.

- (d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-1.1-7(Fees).
- (e) Pursuant to 326 IAC 2-6.1-7, the Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date established in the validation letter. If IDEM, OAM, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied. The operation permit issued shall contain as a minimum the conditions in Section C and Section D of this permit.

#### **SECTION C**

#### **SOURCE OPERATION CONDITIONS**

# **Entire Source**

# C.1 PSD and Part 70 Minor Source Status [326 IAC 2-2] [40 CFR 52.21] [326 IAC 2-7]

- (a) The total source potential to emit of each criteria pollutant is less than 250 tons per year. Therefore the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.
- (b) Any change or modification which may increase potential to emit to 250 tons per year from this source, shall cause this source to be considered a major source under PSD, 326 IAC 2-2 and 40 CFR 52.21, and shall require approval from IDEM, OAM prior to making the change.
- (c) Any change or modification which may increase potential to emit to 10 tons per year of any single hazardous air pollutant, twenty-five (25) tons per year of any combination of hazardous air pollutants, or 100 tons per year of any other regulated pollutant from this source, shall cause this source to be considered a major source under Part 70 Permit Program, 326 IAC 2-7, and shall require approval from IDEM, OAM prior to making the change.

# C.2 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) after issuance of this permit, including the following information on each emissions unit:
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM. IDEM, OAM, may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

# C.3 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

- (a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015 Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1.

(c) The Permittee shall notify the OAM within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

# C.4 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAM, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

# C.5 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)]:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAM, Permits Branch, within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAM, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

# C.6 Permit Revocation [326 IAC 2-1-9]

Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.

- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

# C.7 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

# C.8 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

# **Testing Requirements**

# C.9 Performance Testing [326 IAC 3-6] [326 IAC 2-1.1-11]

(a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing methods approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

at least sixty (60) days before the intended test date for all chromium electroplating facilities and no later than thirty-five (35) days prior to the intended test date for all other facilities. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two (2) weeks prior to the test date.

(b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAM, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

# **Compliance Monitoring Requirements**

# C.10 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

# C.11 Monitoring Methods [326 IAC 3]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

## C.12 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 1-6]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
  - (1) This condition;
  - (2) The Compliance Determination Requirements in Section D of this permit;
  - (3) The Compliance Monitoring Requirements in Section D of this permit;
  - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
  - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:
    - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
    - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:

- (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
- (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
- (3) An automatic measurement was taken when the process was not operating; or
- (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken.

# C.13 Actions Related to Noncompliance Demonstrated by a Stack Test

- (a) When the results of a stack test performed in conformance with Section C Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected emissions unit while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected emissions unit.

The documents submitted pursuant to this condition do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

#### **Record Keeping and Reporting Requirements**

# C.14 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAM, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.

- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

# C.15 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) With the exception of performance tests conducted in accordance with Section C- Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

#### C.16 General Record Keeping Requirements [326 IAC 2-6.1-2]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
  - (1) The date, place, and time of sampling or measurements;
  - (2) The dates analyses were performed;
  - (3) The company or entity performing the analyses;
  - (4) The analytic techniques or methods used;
  - (5) The results of such analyses; and

- (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
  - (1) Copies of all reports required by this permit;
  - (2) All original strip chart recordings for continuous monitoring instrumentation;
  - (3) All calibration and maintenance records;
  - (4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C Compliance Monitoring Plan Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented when operation begins.

# C.17 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Semi-annual Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported. The Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any report shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) All instances of deviations must be clearly identified in such reports. A reportable deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:

- (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
- (2) A malfunction as described in 326 IAC 1-6-2; or
- (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
- (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred or failure to monitor or record the required compliance monitoring is a deviation.

- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

# C.18 Annual Notification [326 IAC 2-6.1-5(a)(5)]

- (a) Annual notification shall be submitted to the Office of Air Management stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.
- (c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Data Section, Office of Air Management Indiana Department of Environmental Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, IN 46206-6015

(d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

#### SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

## **Emissions Unit Description:**

- (a) One (1) decorative chromium electroplating tank, identified as T27, constructed prior to December 16, 1993, using a hexavalent chromium bath, equipped with a packed-bed scrubber, using a chemical fume suppressant containing a wetting agent for control and exhausting at stack 1038Cr.
- (b) One (1) decorative chromium electroplating tank, identified as T23, constructed prior to December 16, 1993, using a hexavalent chromium bath, equipped with a packed-bed scrubber, using a chemical fume suppressant containing a wetting agent for control and exhausting at stack 281Cr.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

# Emission Limitations and Standards [326 IAC 2-6.1-5(1)]

# D.1.1 General Provisions Relating to HAPs [326 IAC 20-1-1] [40 CFR Part 63, Subpart A]

The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR 63 Subpart N.

# D.1.2 Chromium Electroplating NESHAP [326 IAC 20-8-1] [40 CFR 63.342(c)&(f)] [40 CFR 63.343(a)(1)&(2)]

Tanks T27 and T23 are subject to 40 CFR Part 63, Subpart N, which is incorporated by reference as 326 IAC 20-8-1. A copy of this rule is attached.

- (a) The emission limitations in this condition apply only during tank operation, and also apply during periods of startup and shutdown as these are routine occurrences for tanks subject to 326 IAC 20-8-1. The emission limitations do not apply during periods of malfunction, but the work practice standards that address operation and maintenance required by this section must be followed during malfunctions and periods of excess emissions.
- (b) During tank operation, the Permittee shall control chromium emissions discharged to the atmosphere from each tank by using a chemical fume suppressant containing a wetting agent and not allowing the surface tension of the electroplating baths contained within the tanks to exceed forty-five (45) dynes per centimeter (dynes/cm) (3.1 x 10-3 pound-force per foot [lbf/ft]) at any time during operation of the tanks.
- (c) The following work practice standards for the tanks are also applicable:
  - At all times, including periods of startup, shutdown, malfunction and excess emissions, the Permittee shall operate and maintain the tanks, the fume suppressant, the packed-bed scrubber, and monitoring equipment in a manner consistent with good air pollution control practices, consistent with the Operation and Maintenance Plan (OMP) required by Condition D.1.4.
  - (2) Malfunctions and excess emissions shall be corrected as soon as practicable after their occurrence in accordance with the OMP required by Condition D.1.4.
  - (3) These operation and maintenance requirements are enforceable independent of emissions limitations or other requirements in this section.

- (4) Determination of whether acceptable operation and maintenance procedures are being used will be based on the information available to IDEM, OAM, which may include, but is not limited to, monitoring results; review of the OMP, procedures and records; and inspection of the source.
- (5) Based on the results of the determination made under Condition D.1.2(c)(3) above, IDEM, OAM may require that the Permittee make changes to the OMP. Revisions may be required if IDEM, OAM finds that the plan:
  - (A) Does not address a malfunction or period of excess emissions that has occurred;
  - (B) Fails to provide for the operation of the tanks, air pollution control techniques (i.e., the fume suppressant, the packed-bed scrubber), or process monitoring equipment during a malfunction in a manner consistent with good air pollution control practices; or
  - (C) Does not provide adequate procedures for correcting malfunctioning process equipment, air pollution control techniques, or monitoring equipment as quickly as practicable.

# D.1.3 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for tanks T27 and T23 and the packed-bed scrubbers.

#### D.1.4 Operation and Maintenance Plan [40 CFR 63.342(f)(3)]

- (a) The Permittee shall prepare an Operation and Maintenance Plan (OMP) in accordance with 40 CFR 63.342(f)(3) to be implemented no later than the compliance date of tanks T27 and T23. The OMP shall specify the operation and maintenance criteria for the tanks, the fume suppressant, the packed-bed scrubber, and monitoring equipment, and shall include the following elements:
  - (1) Manufacturers recommendations for maintenance of the monitoring equipment used to measure surface tension;
  - (2) A standardized checklist to document the operation and maintenance criteria for the tanks, the fume suppressant, the packed-bed scrubber, and monitoring equipment:
  - (3) Procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions or periods of excess emissions as indicated by monitoring data do not occur;
  - (4) A systematic procedure for identifying malfunctions and periods of excess emissions of the tanks, the fume suppressant, the packed-bed scrubber, and monitoring equipment; and for implementing corrective actions to address such malfunctions;
- (b) The Permittee may use applicable standard operating procedures (SOP) manuals, Occupational Safety and Health Administration (OSHA) plans, or other existing plans such as the PMP required in Condition D.1.3, as the OMP, provided the alternative plans meet the above listed criteria in Condition D.1.4(a).
- (c) If the OMP fails to address or inadequately addresses an event that meets the characteristics of a malfunction or period of excess emissions at the time the plan is initially developed, the Permittee shall revise the OMP within forty five (45) days after such an

event occurs. The revised plan shall include procedures for operating and maintaining the tanks, the fume suppressant, the packed-bed scrubber, and the monitoring equipment, during similar malfunction or excess emissions events, and a program for corrective action for such events.

- (d) If actions taken by the Permittee during periods of malfunction or period of excess emissions are inconsistent with the procedures specified in the OMP, the Permittee shall record the actions taken for that event and shall report by phone such actions within two (2) working days after commencing actions inconsistent with the plan. This report shall be followed by a letter within seven (7) working days after the end of the event, unless the Permittee makes alternative reporting arrangements, in advance, with IDEM, OAM.
- (e) The Permittee shall keep the written OMP on record after it is developed to be made available, upon request, by IDEM, OAM for the life of the tanks or until the tanks are no longer subject to the provisions of 40 CFR 63.340. In addition, if the OMP is revised, the Permittee shall keep previous versions of the OMPs on record to be made available for inspection, upon request by IDEM, OAM for a period of five (5) years after each revision to the plan.

# Compliance Determination Requirements [326 IAC 2-1.1-11]

- D.1.5 Performance Testing Requirements [326 IAC 2-1.1-11] [40 CFR 63.344] [40 CFR 63.343(b)(2)] [40 CFR 63.7]
  - (a) Pursuant to 40 CFR 63.343(c)(5)(i), the Permittee has accepted 45 dynes/cm as the maximum surface tension value that corresponds to compliance with the applicable emission limitation, 0.01 mg/dscm (4.4 x 10-6 gr/dscf), in lieu of establishing the maximum surface tension during an initial performance test.
  - (b) The Permittee is not required to test tanks T27 and T23 by this permit. However, IDEM, OAM may require testing when necessary to determine if the tanks are in compliance. If testing is required by IDEM, OAM, compliance with the limit of 0.01 milligrams per dry standard cubic meter shall be determined by a performance test conducted in accordance with the provisions of 40 CFR 63.344 and Section C Performance Testing.
  - (c) Any change, modification, or reconstruction of the tanks, the fume suppressant, the packedbed scrubber or monitoring equipment may require additional performance testing conducted in accordance with 40 CFR 63.344 and Section C - Performance Testing.

# Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]

- D.1.6 Monitoring to Demonstrate Continuous Compliance [326 IAC 2-6.1-5(a)(2)][40 CFR 63.343 (c)(5) & (7)]
  - (a) Pursuant to 40 CFR 63.343(c)(5)(ii) and (iii), when using a wetting agent in the electroplating bath to comply with the limits specified in Condition D.1.2, the Permittee shall monitor the surface tension of the electroplating baths. Operation of tanks T27 and T23 at a surface tension greater than 45 dynes per centimeter shall constitute noncompliance with the standards.
    - (1) The Permittee shall monitor the surface tension of the electroplating bath during tank operation according to the following schedule:

- (A) The surface tension shall be measured once every 4 hours during operation of the tank with a stalagmometer or a tensiometer as specified in Method 306B, appendix A of this part.
- (B) The time between monitoring can be increased if there have been no exceedances. The surface tension shall be measured once every 4 hours of tank operation for the first 40 hours of tank operation after the compliance date. Once there are no exceedances during 40 hours of tank operation, surface tension measurement may be conducted once every 8 hours of tank operation. Once there are no exceedances during 40 hours of tank operation, surface tension measurement may be conducted once every 40 hours of tank operation on an ongoing basis, until an exceedance occurs. The minimum frequency of monitoring allowed by this subpart is once every 40 hours of tank operation.
- (C) Once an exceedance occurs as indicated through surface tension monitoring, the original monitoring schedule of once every 4 hours must be resumed. A subsequent decrease in frequency shall follow the schedule laid out in paragraph (B) above. For example, if a Permittee had been monitoring a tank once every 40 hours and an exceedance occurs, subsequent monitoring would take place once every 4 hours of tank operation. Once an exceedance does not occur for 40 hours of tank operation, monitoring can occur once every 8 hours of tank operation. Once an exceedance does not occur for 40 hours of tank operation on this schedule, monitoring can occur once every 40 hours of tank operation.
- Once a bath solution is drained from a tank and a new solution added, the original monitoring schedule of once every 4 hours must be resumed, with a decrease in monitoring frequency allowed following the procedures in paragraphs (B) and (C) above.
- (b) Tank operation or operating time is defined as that time when a part is in the tank. When there is no part in a tank for fifteen (15) or more minutes, the tank will not be considered to be in operation, and that time will not be considered operating time. Likewise, if the time between removing one part from the tank and placing another part into the tank is less than fifteen (15) minutes, the tank will be considered to be in operation and that time between plating the two parts will be considered part of the operating time.

# Record Keeping and Reporting Requirements [ 326 IAC 2-6.1-5(a)(2)]

#### D.1.7 Record Keeping Requirements [326 IAC 2-6.1-5(a)(2)] [40 CFR 63.346]

The Permittee shall maintain records to document compliance with Conditions D.1.2 and D.1.4 using the forms provided with this permit. These records shall be maintained in accordance with Section C - General Record Keeping Requirements of this permit and include a minimum of the following:

- (a) Inspection records for the fume suppressant, the packed-bed scrubber system and monitoring equipment to document that the inspection and maintenance required by Conditions D.1.5 and D.1.6 have taken place. The record can take the form of a checklist and should identify the following:
  - (1) The device inspected;
  - (2) The date of inspection;

- (3) A brief description of the working condition of the device during the inspection, including any deficiencies found; and
- (4) Any actions taken to correct deficiencies found during the inspection, including the date(s) such actions were taken.
- (b) Records of all maintenance performed on tanks T27 and T23, the packed-bed scrubber and monitoring equipment.
- (c) Records of the occurrence, duration, and cause (if known) of each malfunction of tanks T27 and T23, the fume suppressant, the packed-bed scrubber, monitoring equipment.
- (d) Records of the occurrence, duration, and cause (if known) of each period of excess emissions of tanks T27 and T23, the fume suppressant, the packed-bed scrubber, and monitoring equipment as indicated by monitoring data collected in accordance with this condition.
- (e) Records of actions taken during periods of malfunction or excess emissions when such actions are inconsistent with the OMP.
- (f) Other records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the OMP.
- (g) Test reports documenting results of all performance tests.
- (h) All measurements as may be necessary to determine the conditions of performance tests, including measurements necessary to determine compliance.
- (i) Records of monitoring data required by 40 CFR 63.343(c) that are used to demonstrate compliance with the standard including the date and time the data are collected.
- (j) The total process operating time, as defined in Condition D.1.6(b), of each tank, during the reporting period.
- (k) Records of the date and time that fume suppressants were added to the electroplating bath, and the amount and type of fume suppressants added.
- (I) All documentation supporting the notifications and reports required by 40 CFR 63.9 and 63.10 (Subpart A, General Provisions) and by Condition D.1.8.
- D.1.8 Reporting Requirements [326 IAC 2-6.1-5(a)(2)] [40 CFR 63.344(a)] [40 CFR 63.345] [40 CFR 63.347]

The notifications and reports required in this section shall be submitted to IDEM, OAM using the address specified in Section C - General Reporting Requirements.

- (a) Notifications:
  - (1) Initial Notifications The Permittee shall notify IDEM, OAM in writing that the source is subject to 40 CFR Part 63, Subpart N. The initial notification for tanks T27 and T23 has been submitted to IDEM, OAM.

- (2) A Notification of Compliance Status (NCS) is required each time that the facility becomes subject to the requirements of 40 CFR Part 63 Subpart N.
  - (A) The NCS shall be submitted to IDEM, OAM, and shall list, for each tank, the information identified in 40 CFR 63.347(e)(2).
  - (B) The NCS for tanks T27 and T23 has been submitted to IDEM, OAM.
- (3) Notification of Construction or Reconstruction
  Pursuant to 40 CFR 63.345(b)(1), the Permittee may not construct a new tank
  subject to 40 CFR 63, Subpart N (including non-affected tanks defined in 40 CFR
  63.344(e)) without submitting a Notification of Construction or Reconstruction
  (NCR) to IDEM, OAM. In addition, the Permittee may not change, modify, or
  reconstruct tanks T27 and T23 without submitting a Notification of Construction or
  Reconstruction (NCR) to IDEM, OAM.
  - (A) The NCR shall contain the information identified in 40 CFR 63.345(b) (2) and (3).
  - (B) A change, modification, or reconstruction of this facility includes any change in the air pollution control techniques, the addition of add-on control devices, or the construction of duct work for the purpose of controlling both existing tanks and non-affected facilities by a common control technique or device.
  - (C) A complete application to construct new chromium electroplating or chromium anodizing tanks serves as this notification. Likewise, the complete application to modify or reconstruct tanks T27 and T23 serves as this notification.
  - (D) Pursuant to 326 IAC 2-1.1-2(a), permission must be received from IDEM, OAM before construction, modification, or reconstruction may commence.
- (b) Performance Test Results

The Permittee shall document results from any future performance tests in a complete test report that contains the information required in 40 CFR 344(a).

The Permittee shall submit reports of performance test results as part of the Notification of Compliance Status, described in 40 CFR 63.347(e), no later than forty-five (45) days following the completion of the performance test.

(c) Ongoing Compliance Status Report

The Permittee shall prepare summary reports to document the ongoing compliance status of tanks T27 and T23 using the Ongoing Compliance Status Report form provided with this permit. This report shall contain the information specified in 40 CFR 63.347(g)(3).

Because tanks T27 and T23 are located at site that is an area source of hazardous air pollutants (HAPs), the Ongoing Compliance Status Report shall be retained on site and made available to IDEM, OAM upon request.

- (1) The Ongoing Compliance Status Report shall be completed according to the following schedule except as provided in paragraphs (c)(2).
  - (A) The first report shall cover the period from the start-up date of the emissions units to December 31 of the year in which the emissions units

begin operation.

- (B) Following the first year of reporting, the report shall be completed on a calendar year basis with the reporting period covering from January 1 to December 31.
- (2) If either of the following conditions are met, semiannual reports shall be prepared and submitted to IDEM, OAM:
  - (A) The total duration of excess emissions (as indicated by the monitoring data collected by the Permittee in accordance with 40 CFR 63.343(c)) is one percent (1%) or greater of the total operating time as defined in Condition D.1.6(b) for the reporting period; or
  - (B) The total duration of malfunctions of the add-on air pollution control device and monitoring equipment is five percent (5%) or greater of the total operating time as defined in Condition D.1.6(b).

Once the Permittee reports an exceedance as defined above, Ongoing Compliance Status Reports shall be submitted semiannually until a request to reduce reporting frequency is approved.

(3) IDEM, OAM may determine on a case-by-case basis that the summary report shall be completed more frequently and submitted, or that the annual report shall be submitted instead of being retained on site, if these measures are necessary to accurately assess the compliance status of the source.

# SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

## **Emissions Unit Description:**

- (c) One (1) nickel electroplating bath, identified as T23, equipped with a wet scrubber and exhausting at stack 1038Ni.
- (d) One (1) nickel electroplating bath, identified as T18, equipped with a wet scrubber and exhausting at stack 281Ni.
- (e) One (1) copper plating tank, identified as 1038, equipped with a wet scrubber and exhausting at stack 1038Cu.
- (f) One (1) cyanide plating tank, identified as T18, equipped with a wet scrubber and exhausting at stack 574.
- (g) One (1) formaldehyde electroless plating tank, identified as EC Tank T12/T13, equipped with a wet scrubber and exhausting at stack 489.
- (h) One (1) Brite Dip tank, identified as Process Map T14, equipped with a wet scrubber and exhausting at stack 1715.
- (i) Two (2) rack strip lines, identified as 255R and 255P, using sulfuric acid and nitric acid, respectively, and equipped with wet scrubbers and exhausting at stacks 255R and 255P, respectively.
- (j) Buffing operations, equipped with three (3) air washers, identified as 2125, 2490 and 3011, and exhausting at stacks 2126, 2491 and 3011, respectively.
- (k) Brazing operations, identified as 10200, exhausting at stacks 1183, 1873, 1874, 1212 and 1105, capacity: 10.3 pounds per hour of solder, 1,800 pounds per hour of brass or copper parts, and 5.72 million British thermal units per hour.
- (I) One (1) cure oven, identified as 569, fired by natural gas and exhausting at stacks 569 North and 569 South, capacity: 3.6 million British thermal units per hour.
- (m) One (1) natural gas fired fluidized bed burn-off oven, rated at 0.99 million British thermal units per hour (mmBtu/hr), with a maximum capacity of 301 pounds per hour of parts and 1.56 pounds per hour of sand, using a cyclone for particulate matter control, and exhausting at one (1) stack identified as 2918.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

#### Emission Limitations and Standards [326 IAC 2-6.1-5(1)]

# D.2.1 Particulate Matter (PM) [326 IAC 6-3-2]

- (a) The particulate matter (PM) from the buffing operations shall be limited to less than 3.38 pounds per hour when operating of a process weight rate of 1,500 pounds per hour.
- (b) The particulate matter (PM) from the fluidized bed burn off oven shall be limited to less than 1.15 pounds per hour, when operating at a process weight rate of 303 pounds per hour.

These limits were computed using the following equation:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$
 where  $E =$  rate of emission in pounds per hour and  $P =$  process weight rate in tons per hour

(c) The particulate matter (PM) from the brazing operations shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

The limitations were calculated using the following equation:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$
 where  $E =$  rate of emission in pounds per hour and  $P =$  process weight rate in tons per hour

# D.2.2 Volatile Organic Compounds (VOC) [326 IAC 8-3]

The requirement from the Registration issued April 26, 1982 and the Registration issued July 5, 1984 that emissions shall be at a level acceptable to 325 IAC 8-3, is not applicable because the solvent recovery facility and degreaser registered by those approvals are no longer in existence at the source.

# Compliance Determination Requirements [326 IAC 2-1.1-11]

# D.2.3 Testing Requirements [326 IAC 2-1.1-11]

The Permittee is not required to test these emissions units by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions units are in compliance. If testing is required by IDEM, compliance with the PM limits specified in Condition D.2.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

#### D.2.4 Particulate Matter (PM)

Pursuant to Pursuant to CP031-9717-00007, issued on May 28, 1998, the cyclone for PM control shall be in operation at all times when the fluidized bed burn off oven is in operation.

#### SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

# **Emissions Unit Description:**

(n) One (1) powder spray booth, identified as 1421, equipped with a baghouse and exhausting to stack 1421, capacity: 16 pounds of powder per hour and 1,000 pounds per hour of raw materials.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

# Emission Limitations and Standards [326 IAC 2-6.1-5(1)]

# D.3.1 Particulate Matter (PM) [326 IAC 6-3-2]

The particulate matter (PM) from the powder spray booth shall be limited to 2.58 pounds per hour when operating at a process weight rate of 1,000 pounds per hour. This limitation was determined by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$  where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

## Compliance Determination Requirements [326 IAC 2-1.1-11]

#### D.3.2 Testing Requirements [326 IAC 2-1.1-11]

The Permittee is not required to test this emissions unit by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.3.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

#### D.3.3 Particulate Matter (PM)

The baghouse for PM control shall be in operation at all times when the powder spray booth is in operation.

#### **SECTION D.4**

#### **EMISSIONS UNIT OPERATION CONDITIONS**

## **Emissions Unit Description:**

- (o) One (1) boiler, identified as 1854, constructed in 1993, fired by natural gas and exhausting at stack 1854, capacity: 2.10 million British thermal units per hour.
- (p) Two (2) boilers identified as 1307 and 1308, constructed in 1987, fired by natural gas and exhausting at stack 1307/1308, capacity: 0.75 million British thermal units per hour.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

# Emission Limitations and Standards [326 IAC 2-6.1-5(1)]

# D.4.1 Particulate Matter Limitation (PM) [326 IAC 6-2-4]

- (a) Pursuant to 326 IAC 6-2-4, the PM emissions from the one (1) boiler, identified as 1854, shall not exceed 0.37 pound per million British thermal units.
- (b) Pursuant to 326 IAC 6-2-4, the PM emissions from the two (2) boilers, identified as 1307 and 1308, shall not exceed 0.46 pound per million British thermal units.

These limitations were computed using the following equation:

$$Pt = 1.09/Q^{0.26}$$

where:

- Pt = Pounds of particulate matter emitted per million British thermal units (lb/MMBtu) heat input
- Q = Total source maximum operating capacity rating in million British thermal units per hour (MMBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

# Compliance Determination Requirements [326 IAC 2-1.1-11]

#### D.4.2 Testing Requirements [326 IAC 2-1.1-11]

The Permittee is not required to test these emissions units by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions units are in compliance. If testing is required by IDEM, compliance with the PM limits specified in Condition D.4.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

#### SECTION D.5 EMISSIONS UNIT OPERATION CONDITIONS

## **Emissions Unit Description:**

(q) One (1) boiler, identified as 586, constructed in 1975, fired by natural gas, exhausting at stack 586, capacity: 25.20 million British thermal units per hour.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

# Emission Limitations and Standards [326 IAC 2-6.1-5(1)]

# D.5.1 Particulate Matter Limitation (PM) [326 IAC 6-2-3]

Pursuant to 326 IAC 6-2-3 (e) (Particulate emission limitations for sources of indirect heating: emission limitations for facilities specified in 326 IAC 6-2-1 (b)), particulate emissions from all facilities used for indirect heating purposes which have 250 million British thermal units or less heat input or less and began operation after June 8, 1972, shall in no case exceed 0.6 pound of particulate matter per million British thermal units heat input. Therefore, the one (1) boiler, identified as 586, shall be limited to PM emissions of no more than 0.6 pound per million British thermal units.

# Compliance Determination Requirements [326 IAC 2-1.1-11]

# D.5.2 Testing Requirements [326 IAC 2-1.1-11]

The Permittee is not required to test this emissions unit by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance. If testing is required by IDEM, compliance with the PM and  $SO_2$  limits specified in Conditions D.5.1 and D.5.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

#### Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]

# D.5.3 Record Keeping Requirements

- (a) The Permittee shall maintain monthly records of the amount and type of fuel burned in the one (1) boiler pursuant to 40 CFR 60.48c, Subpart Dc.
- (b) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

# D.5.4 Natural Gas Fired Boiler Certification

An annual certification shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the Natural Gas Fired Boiler Certification form located at the end of this permit, or its equivalent, no later than July 1 of each year.

#### **SECTION D.6**

#### **EMISSIONS UNIT OPERATION CONDITIONS**

## **Emissions Unit Description:**

- (r) One (1) boiler, identified as 1513, constructed in 1990, fired by natural gas and exhausting at stack 1513, capacity: 32.94 million British thermal units per hour.
- (s) One (1) boiler, identified as 2256, constructed in 1994, fired by natural gas and exhausting at stack 2256, capacity: 14.70 million British thermal units per hour.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

# Emission Limitations and Standards [326 IAC 2-6.1-5(1)]

# D.6.1 Particulate Matter Limitation (PM) [326 IAC 6-2-4]

- (a) Pursuant to 326 IAC 6-2-4, the PM emissions from the one (1) boiler, identified as 1513, shall not exceed 0.38 pound per million British thermal units.
- (b) Pursuant to 326 IAC 6-2-4, the PM emissions from the one (1) boiler, identified as 2256, shall not exceed 0.35 pound per million British thermal units.

These limitations were computed using the following equation:

$$Pt = 1.09/Q^{0.26}$$

where:

- Pt = Pounds of particulate matter emitted per million British thermal units (lb/MMBtu) heat input
- Q = Total source maximum operating capacity rating in million British thermal units per hour (MMBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

# D.6.2 Stack Height and Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 1-7] [326 IAC 7]

The requirements from Conditions 2, 3, 4 and 5 of PC (16) 1815, issued on January 5, 1990, are no longer applicable because the one (1) boiler, identified as 1513, is no longer capable of burning no. 2 fuel oil. Those conditions required that although 326 IAC 1-7-3 does not apply, the minimum stack height shall be limited to 50 feet, the sulfur content in the number 2 fuel oil shall be limited to 0.5 percent by weight, pursuant to 326 IAC 7-1-2, sulfur dioxide emissions shall be emitted at less than 6 pounds per million Btu input, and reports of the calendar month or annual average sulfur content, heat content, fuel consumption and sulfur dioxide emission rate in pounds per million Btu shall be submitted upon request pursuant to 326 IAC 7-1-3. Therefore, the requirements of 326 IAC 1-7 and 326 IAC 7 are not applicable to these boilers.

#### Compliance Determination Requirement [326 IAC 2-1.1-11]

# D.6.3 Testing Requirements [326 IAC 2-1.1-11]

The Permittee is not required to test these emissions units by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions units are in compliance.

If testing is required by IDEM, compliance with the PM limit specified in Condition D.6.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

# Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]

# D.6.4 Record Keeping Requirements [40CFR 60.48c, NSPS Subpart Dc]

- (a) The Permittee shall maintain daily records of the amount and type of fuel burned in the two (2) boilers pursuant to 40 CFR 60.48c, Subpart Dc.
- (b) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

# D.6.5 Natural Gas Fired Boiler Certification

An annual certification shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the Natural Gas Fired Boiler Certification form located at the end of this permit, or its equivalent, no later than July 1 of each year.

#### **SECTION D.7**

#### **EMISSIONS UNIT OPERATION CONDITIONS**

# **Emissions Unit Description:**

(t) One (1) decorative chromium electroplating tank, identified as T21, using a hexavalent chromium bath, equipped with a packed-bed scrubber, using a chemical fume suppressant containing a wetting agent for control and exhausting at stack 253Cr.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

# Emission Limitations and Standards [326 IAC 2-6.1-5(1)]

D.7.1 General Provisions Relating to HAPs [326 IAC 20-1-1] [40 CFR Part 63, Subpart A]

The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR 63 Subpart N.

D.7.2 Chromium Electroplating NESHAP [326 IAC 20-8-1] [40 CFR 63.342(c)&(f)] [40 CFR 63.343(a) (1)&(2)]

Tank T21 is subject to 40 CFR Part 63, Subpart N, which is incorporated by reference as 326 IAC 20-8-1. A copy of this rule is attached.

- (a) The emission limitations in this condition apply only during tank operation, and also apply during periods of startup and shutdown as these are routine occurrences for tanks subject to 326 IAC 20-8-1. The emission limitations do not apply during periods of malfunction, but the work practice standards that address operation and maintenance required by this section must be followed during malfunctions and periods of excess emissions.
- (b) During tank operation, the Permittee shall control chromium emissions discharged to the atmosphere from each tank by using a chemical fume suppressant containing a wetting agent and not allowing the surface tension of the electroplating baths contained within the tank to exceed forty-five (45) dynes per centimeter (dynes/cm) (3.1 x 10-3 pound-force per foot [lbf/ft]) at any time during operation of the tank.
- (c) The following work practice standards for the tank are also applicable:
  - (1) At all times, including periods of startup, shutdown, malfunction and excess emissions, the Permittee shall operate and maintain the tank, the fume suppressant, the packed-bed scrubber, and monitoring equipment in a manner consistent with good air pollution control practices, consistent with the Operation and Maintenance Plan (OMP) required by Condition D.7.4.
  - (2) Malfunctions and excess emissions shall be corrected as soon as practicable after their occurrence in accordance with the OMP required by Condition D.7.4.
  - (3) These operation and maintenance requirements are enforceable independent of emissions limitations or other requirements in this section.
  - (4) Determination of whether acceptable operation and maintenance procedures are being used will be based on the information available to IDEM, OAM, which may include, but is not limited to, monitoring results; review of the OMP, procedures and records; and inspection of the source.

- (5) Based on the results of the determination made under Condition D.7.2(c)(3) above, IDEM, OAM may require that the Permittee make changes to the OMP. Revisions may be required if IDEM, OAM finds that the plan:
  - (A) Does not address a malfunction or period of excess emissions that has occurred:
  - (B) Fails to provide for the operation of the tank, air pollution control techniques (i.e., the fume suppressant, the packed-bed scrubber), or process monitoring equipment during a malfunction in a manner consistent with good air pollution control practices; or
  - (C) Does not provide adequate procedures for correcting malfunctioning process equipment, air pollution control techniques, or monitoring equipment as quickly as practicable.

# D.7.3 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for tank T21 and the packed-bed scrubber.

# D.7.4 Operation and Maintenance Plan [40 CFR 63.342(f)(3)]

- (a) The Permittee shall prepare an Operation and Maintenance Plan (OMP), in accordance with 40 CFR 63.342(f)(3) to be implemented no later than the compliance date of tank T21. The OMP shall specify the operation and maintenance criteria for the tank, the fume suppressant, the packed-bed scrubber, and monitoring equipment, and shall include the following elements:
  - (1) Manufacturers recommendations for maintenance of the monitoring equipment used to measure surface tension;
  - (2) A standardized checklist to document the operation and maintenance criteria for the tank, the fume suppressant, the packed-bed scrubber, and monitoring equipment;
  - (3) Procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions or periods of excess emissions as indicated by monitoring data do not occur;
  - (4) A systematic procedure for identifying malfunctions and periods of excess emissions of the tank, the fume suppressant, the packed-bed scrubber, and monitoring equipment; and for implementing corrective actions to address such malfunctions;
- (b) The Permittee may use applicable standard operating procedures (SOP) manuals, Occupational Safety and Health Administration (OSHA) plans, or other existing plans such as the PMP required in Condition D.7.3, as the OMP, provided the alternative plans meet the above listed criteria in Condition D.7.4(a).
- (c) If the OMP fails to address or inadequately addresses an event that meets the characteristics of a malfunction or period of excess emissions at the time the plan is initially developed, the Permittee shall revise the OMP within forty five (45) days after such an event occurs. The revised plan shall include procedures for operating and maintaining the tank, the fume suppressant, the packed-bed scrubber, and the monitoring equipment, during similar malfunction or excess emissions events, and a program for corrective action for such events.
- (d) If actions taken by the Permittee during periods of malfunction or period of excess emis-

sions are inconsistent with the procedures specified in the OMP, the Permittee shall record the actions taken for that event and shall report by phone such actions within two (2) working days after commencing actions inconsistent with the plan. This report shall be followed by a letter within seven (7) working days after the end of the event, unless the Permittee makes alternative reporting arrangements, in advance, with IDEM, OAM.

(e) The Permittee shall keep the written OMP on record after it is developed to be made available, upon request, by IDEM, OAM for the life of the tank or until the tank is no longer subject to the provisions of 40 CFR 63.340. In addition, if the OMP is revised, the Permittee shall keep previous versions of the OMPs on record to be made available for inspection, upon request by IDEM, OAM for a period of five (5) years after each revision to the plan.

# **Compliance Determination Requirements [326 IAC 2-1.1-11]**

- D.7.5 Performance Testing Requirements [326 IAC 2-1.1-11] [40 CFR 63.344] [40 CFR 63.343(b)(2)] [40 CFR 63.7]
  - (a) Pursuant to 40 CFR 63.343(c)(5)(i), the Permittee has accepted 45 dynes/cm as the maximum surface tension value that corresponds to compliance with the applicable emission limitation, 0.01 mg/dscm (4.4 x 10-6 gr/dscf), in lieu of establishing the maximum surface tension during an initial performance test.
  - (b) The Permittee is not required to test tank T21 by this permit. However, IDEM, OAM may require testing when necessary to determine if the tank is in compliance. If testing is required by IDEM, OAM, compliance with the limit of 0.01 milligrams per dry standard cubic meter shall be determined by a performance test conducted in accordance with the provisions of 40 CFR 63.344 and Section C Performance Testing.
  - (c) Any change, modification, or reconstruction of tank T21, the fume suppressant, the packedbed scrubber or monitoring equipment may require additional performance testing conducted in accordance with 40 CFR 63.344 and Section C - Performance Testing.

#### Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

- D.7.6 Monitoring to Demonstrate Continuous Compliance [326 IAC 2-5.1-3(e)(2)] [ 326 IAC 2-6.1-5(a)(2)] [40 CFR 63.343 (c)(5) & (7)]
  - (a) Pursuant to 40 CFR 63.343(c)(5)(ii) and (iii), when using a wetting agent in the electroplating bath to comply with the limits specified in Condition D.7.2, the Permittee shall monitor the surface tension of the electroplating bath. Operation of tank T21 at a surface tension greater than 45 dynes per centimeter shall constitute noncompliance with the standards.
    - (1) The Permittee shall monitor the surface tension of the electroplating bath during tank operation according to the following schedule:
      - (A) The surface tension shall be measured once every 4 hours during operation of the tank with a stalagmometer or a tensiometer as specified in Method 306B, appendix A of this part.
      - (B) The time between monitoring can be increased if there have been no exceedances. The surface tension shall be measured once every 4 hours of tank operation for the first 40 hours of tank operation after the compliance date. Once there are no exceedances during 40 hours of tank operation, surface tension measurement may be conducted once every 8 hours of tank operation. Once there are no exceedances during 40 hours of tank operation, surface tension measurement may be conducted once every 40 hours of tank operation on an ongoing basis, until an exceedance occurs.

The minimum frequency of monitoring allowed by this subpart is once every 40 hours of tank operation.

- (C) Once an exceedance occurs as indicated through surface tension monitoring, the original monitoring schedule of once every 4 hours must be resumed. A subsequent decrease in frequency shall follow the schedule laid out in paragraph (B) above. For example, if a Permittee had been monitoring a tank once every 40 hours and an exceedance occurs, subsequent monitoring would take place once every 4 hours of tank operation. Once an exceedance does not occur for 40 hours of tank operation, monitoring can occur once every 8 hours of tank operation. Once an exceedance does not occur for 40 hours of tank operation on this schedule, monitoring can occur once every 40 hours of tank operation.
- Once a bath solution is drained from a tank and a new solution added, the original monitoring schedule of once every 4 hours must be resumed, with a decrease in monitoring frequency allowed following the procedures in paragraphs (B) and (C) above.
- (b) Tank operation or operating time is defined as that time when a part is in the tank. When there is no part in a tank for fifteen (15) or more minutes, the tank will not be considered to be in operation, and that time will not be considered operating time. Likewise, if the time between removing one part from the tank and placing another part into the tank is less than fifteen (15) minutes, the tank will be considered to be in operation and that time between plating the two parts will be considered part of the operating time.

# Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [ 326 IAC 2-6.1-5(a)(2)]

- D.7.7 Record Keeping Requirements [326 IAC 2-5.1-3(e)(2)] [ 326 IAC 2-6.1-5(a)(2)] [40 CFR 63.346]

  The Permittee shall maintain records to document compliance with Conditions D.7.2 and D.7.4 using the forms provided with this permit. These records shall be maintained in accordance with Section C General Record Keeping Requirements of this permit and include a minimum of the following:
  - (a) Inspection records for the fume suppressant, the packed-bed scrubber system and monitoring equipment to document that the inspection and maintenance required by Conditions D.7.5 and D.7.6 have taken place. The record can take the form of a checklist and should identify the following:
    - (1) The device inspected;
    - (2) The date of inspection;
    - (3) A brief description of the working condition of the device during the inspection, including any deficiencies found; and
    - (4) Any actions taken to correct deficiencies found during the inspection, including the date(s) such actions were taken.
  - (b) Records of all maintenance performed on tank T21, the fume suppressant, the packed-bed scrubber and monitoring equipment.
  - (c) Records of the occurrence, duration, and cause (if known) of each malfunction of tank T21, the fume suppressant, the packed-bed scrubber, monitoring equipment.

- (d) Records of the occurrence, duration, and cause (if known) of each period of excess emissions of tank T21, the fume suppressant, the packed-bed scrubber, and monitoring equipment as indicated by monitoring data collected in accordance with this condition.
- (e) Records of actions taken during periods of malfunction or excess emissions when such actions are inconsistent with the OMP.
- (f) Other records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the OMP.
- (g) Test reports documenting results of all performance tests.
- (h) All measurements as may be necessary to determine the conditions of performance tests, including measurements necessary to determine compliance.
- (i) Records of monitoring data required by 40 CFR 63.343(c) that are used to demonstrate compliance with the standard including the date and time the data are collected.
- (j) The total process operating time, as defined in Condition D.7.6(b), of the tank, during the reporting period.
- (k) Records of the date and time that fume suppressants were added to the electroplating bath, and the amount and type of fume suppressants added.
- (I) All documentation supporting the notifications and reports required by 40 CFR 63.9 and 63.10 (Subpart A, General Provisions) and by Condition D.7.8.

# D.7.8 Record Keeping Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)] [40 CFR 63.344(a)] [40 CFR 63.345] [40 CFR 63.347]

The notifications and reports required in this section shall be submitted to IDEM, OAM using the address specified in Section C - General Reporting Requirements.

- (a) Notifications:
  - (1) Initial Notifications The Permittee shall submit an Initial Notification for tank T21 as follows:
    - (A) A notification of the actual date when construction of tank T21 commenced shall be submitted no later than thirty (30) days after such date.
    - (B) A notification of the actual date of startup of tank T21 shall be submitted within thirty (30) days after such date.
  - (2) A Notification of Compliance Status (NCS) is required each time that the facility becomes subject to the requirements of 40 CFR Part 63 Subpart N.
    - (A) The NCS shall be submitted to IDEM, OAM, and shall list, for each tank, the information identified in 40 CFR 63.347(e)(2).
    - (B) The NCS for tank T21 shall be submitted to IDEM, OAM no later than 30 days after the startup date.
  - (3) Notification of Construction or Reconstruction
    Pursuant to 40 CFR 63.345(b)(1), the Permittee may not construct a new tank subject to 40 CFR 63, Subpart N (including non-affected tanks defined in 40 CFR

63.344(e)) without submitting a Notification of Construction or Reconstruction (NCR) to IDEM, OAM. In addition, the Permittee may not change, modify, or reconstruct tank T21 without submitting an NCR to IDEM, OAM.

- (A) The NCR shall contain the information identified in 40 CFR 63.345(b) (2) and (3).
- (B) A change, modification, or reconstruction of this facility includes any change in the air pollution control techniques, the addition of add-on control devices, or the construction of duct work for the purpose of controlling both existing tanks and non-affected facilities by a common control technique or device.
- (C) A complete application to construct new chromium electroplating or chromium anodizing tanks serves as this notification. Likewise, the complete application to modify or reconstruct tank T21 serves as this notification.
- (D) Pursuant to 326 IAC 2-1.1-2(a), permission must be received from IDEM, OAM before construction, modification, or reconstruction may commence.
- (b) Performance Test Results

The Permittee shall document results from the initial performance test and any future performance tests in a complete test report that contains the information required in 40 CFR 344(a).

The Permittee shall submit reports of performance test results as part of the Notification of Compliance Status, described in 40 CFR 63.347(e), no later than forty-five (45) days following the completion of the performance test.

(c) Ongoing Compliance Status Report

The Permittee shall prepare summary reports to document the ongoing compliance status of tank T21 using the Ongoing Compliance Status Report form provided with this permit. This report shall contain the information specified in 40 CFR 63.347(g)(3).

Because tank T21 is located at site that is an area source of hazardous air pollutants (HAPs), the Ongoing Compliance Status Report shall be retained on site and made available to IDEM, OAM upon request.

- (1) The Ongoing Compliance Status Report shall be completed according to the following schedule except as provided in paragraphs (c)(2).
  - (A) The first report shall cover the period from the start-up date of the emissions units to December 31 of the year in which the emissions units begin operation.
  - (B) Following the first year of reporting, the report shall be completed on a calendar year basis with the reporting period covering from January 1 to December 31.
- (2) If either of the following conditions are met, semiannual reports shall be prepared and submitted to IDEM, OAM:
  - (A) The total duration of excess emissions (as indicated by the monitoring data collected by the Permittee in accordance with 40 CFR 63.343(c)) is one percent (1%) or greater of the total operating time as defined in Condition D.7.6(b) for the reporting period; or

(B) The total duration of malfunctions of the add-on air pollution control device and monitoring equipment is five percent (5%) or greater of the total operating time as defined in Condition D.7.6(b).

Once the Permittee reports an exceedance as defined above, Ongoing Compliance Status Reports shall be submitted semiannually until a request to reduce reporting frequency is approved.

(3) IDEM, OAM may determine on a case-by-case basis that the summary report shall be completed more frequently and submitted, or that the annual report shall be submitted instead of being retained on site, if these measures are necessary to accurately assess the compliance status of the source.

## **MALFUNCTION REPORT**

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR MANAGEMENT

**FAX NUMBER - 317 233-5967** 

This form should only be used to repand to qualify for the exemption under		Rule 326 IAC 1-6	
THIS FACILITY MEETS THE APPLICABILIT PARTICULATE MATTER?, 25 TONS 25 TONS/YEAR VOC?, 25 TONS/YE.?, 25 TONS/YEAR REDUCED SULFUTONS/YEAR CARBON MONOXIDE?TONS/YEAR ANY COMBINATION HAZARD MEASURED AS ELEMENTAL LEAD?FROM MALFUNCTIONING CONTROL EQUAPPLICABLE LIMITATION	/YEAR SULFUR DIOXIDE ?, AR HYDROGEN SULFIDE ?, JR COMPOUNDS ?, 25 TONS, , 10 TONS/YEAR ANY SINGLE HAZ DOUS AIR POLLUTANT ?, 1 T _, OR IS A SOURCE LISTED UNDE	25 TONS/YEAR NITROGEI 25 TONS/YEAR TOTAL REI S/YEAR FLUORIDES ? ZARDOUS AIR POLLUTANT ON/YEAR LEAD OR LEAD R 326 IAC 2-5.1-3(2) ?	N OXIDES ?, DUCED SULFUR _, 100 -?, 25 COMPOUNDS EMISSIONS
THIS MALFUNCTION RESULTED IN A VIO PERMIT LIMIT OF	LATION OF: 326 IAC OR,	PERMIT CONDITION #	AND/OR
THIS INCIDENT MEETS THE DEFINITION	OF 'MALFUNCTION' AS LISTED OF	N REVERSE SIDE ? Y	N
THIS MALFUNCTION IS OR WILL BE LONG	GER THAN THE ONE (1) HOUR RE	PORTING REQUIREMENT	? Y N
COMPANY: Delta Faucet Company LOCATION: (CITY AND COUNTY) Gree PERMIT NO. 031-11706 AFS PLANT CONTROL/PROCESS DEVICE WHICH MALE	ensburg / Decatur ID: 031-00007 AFS POINT ID	): INSP:	
DATE/TIME MALFUNCTION STARTED: ESTIMATED HOURS OF OPERATION WITH			
DATE/TIME CONTROL EQUIPMENT B	ACK-IN SERVICE/	_/ 20	AM / PM
TYPE OF POLLUTANTS EMITTED: TS	P, PM-10, SO2, VOC, OTH	ER:	
ESTIMATED AMOUNT OF POLLUTANT	EMITTED DURING MALFUNCT	TION:	
MEASURES TAKEN TO MINIMIZE EMIS	SIONS:		
REASONS WHY FACILITY CANNOT BE	SHUTDOWN DURING REPAIR	RS:	
CONTINUED OPERATION REQUIRED TO POSITION OPERATION NECESSARY TO CONTINUED OPERATION NECESSARY TO INTERIM CONTROL MEASURES: (IF APPLICATION OF THE PROPERTY OF	PREVENT INJURY TO PERSONS: PREVENT SEVERE DAMAGE TO I	EQUIPMENT:	
MALFUNCTION REPORTED BY:	(SIGNATURE IF FAXED)	TITLE:	
MALFUNCTION RECORDED BY:	DATE:	TIM	E:

# Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

## 326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

## 326 IAC 1-2-39 "Malfunction" definition

- Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.
- \* **Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain	n rationale:	

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR MANAGEMENT COMPLIANCE DATA SECTION

## MINOR SOURCE OPERATING PERMIT ANNUAL NOTIFICATION

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	Delta Faucet Com	npany
Address:	1425 West Main S	Street
City:	Greensburg, India	ana 47240
Phone #:	812 - 663 - 4433	
MSOP #:	031-11706-00007	
	elta Faucet Company is	<ul><li>9 still in operation.</li><li>9 no longer in operation.</li></ul>
I hereby certify that De	elta Faucet Company is	<ul><li>9 in compliance with the requirements of MSOP 031-11706-00007.</li><li>9 not in compliance with the requirements of MSOP 031-11706-00007.</li></ul>
Authorized Individu	ıal (typed):	
Title:		
Signature:		
Date:		
		which the source is not in compliance, provide a narrative re compliance and the date compliance was, or will be
Noncompliance:		

## **COMPLIANCE DATA SECTION**

## MINOR SOURCE OPERATING PERMIT NATURAL GAS FIRED BOILER CERTIFICATION

Source Name:

Delta Faucet Company 1425 West Main Street, Greensburg, IN 47240 Source Address:

P.O. Box 47, Greensburg, IN 47240 031-11706-00007

Mailing Address: MSOP No.:

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.						
Report period Beginning: Ending:						
Boiler A	Affected	Alternate Fuel	Days burning alternate fuel From To			
		ation and belief formed are true, accurate, and	after reasonable inquiry, the statements and complete.			
Signature:						
Printed Name						
Title/Position:						
Date:						

JAN

**FEB** 

MAR

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR MANAGEMENT **COMPLIANCE DATA SECTION**

## **CHROMIUM ELECTROPLATING NESHAP ONGOING COMPLIANCE STATUS REPORT**

So Ma	urce Name: Delta Faucet Company urce Address: 1425 West Main Street, Greensburg, IN 47240 ling Address: P.O. Box 47, Greensburg, IN 47240 OP No.: 031-11706-00007					
Ty <sub>l</sub> Mo Pa	Tank ID #:  Type of process:  [Hard, Decorative, Anodizing]  Monitoring Parameter:  [e.g., Surface tension of the electroplating bath]  Parameter Value:  [e.g., 45 dynes per centimeter]  Limits:  Total chromium concentration may not exceed mg/dscm					
This The	s form is to be used to reper frequency for completing	ort compliance for the Chromium Ele this report may be altered by the IDE	ctroplating NESHAP only. EM, OAM, Compliance Branch.			
<u>Cor</u> <u>Cor</u>	mpanies classified as a ma mpanies classified as an a	ajor source: submit this report no late rea source: complete this report no la and retain on site unless	ater than 30 days after the end of th	reporting period. e reporting period,		
Thi	s form consists of 2 page	es		Page 1 of 2		
BEGIN	BEGINNING AND ENDING DATES OF THE REPORTING PERIOD:					
TOTAL	OPERATING TIME OF T	HE TANK DURING THE REPORTIN	IG PERIOD:			
MAJOI	MAJOR AND AREA SOURCES: CHECK ONE					
9	9 NO DEVIATIONS OF THE MONITORING PARAMETER ASSOCIATED WITH THIS TANK FROM THE COMPLIANT VALUE OR RANGE OF VALUES OCCURRED DURING THIS REPORTING PERIOD.					
9	THE MONITORING PARAMETER DEVIATED FROM THE COMPLIANT VALUE OR RANGE OF VALUES DURING THIS REPORTING PERIOD (THUS INDICATING THE EMISSION LIMITATION MAY HAVE BEEN EXCEEDED, WHICH COULD RESULT IN MORE FREQUENT REPORTING).					
AREA (I.E., NON-MAJOR) SOURCES OF HAP ONLY: IF DEVIATIONS OCCURRED, LIST THE AMOUNT OF TANK OPERATING TIME EACH MONTH THAT MONITORING RECORDS SHOW THE MONITORING PARAMETER DEVIATED FROM THE COMPLIANT VALUE OR RANGE OF VALUES.						
JAN		APR	JUL	ОСТ		
FEB		MAY	AUG	NOV		
MAR	MAR JUN SEP DEC					
HARD	HARD CHROME TANKS / MAXIMUM RECTIFIER CAPACITY LIMITED IN ACCORDANCE WITH 40 CFR 63.342(c)(2) ONLY:					

LIST THE ACTUAL AMPERE-HOURS CONSUMED (BASED ON AN AMP-HR METER) BY THE INDIVIDUAL TANK.

JUL

AUG

SEP

OCT

NOV

DEC

APR

MAY

JUN

Phone:

## CHROMIUM ELECTROPLATING NESHAP ONGOING COMPLIANCE STATUS REPORT

ATTA	ACH A SEPARATE PAGE IF NEEDED	Page 2 of 2
	DPERATION AND MAINTENANCE PLAN REQUIRED BY 40 CFR 63.342 (f)(3) WAS NOT FOLLOWED, PF IATION OF THE REASONS FOR NOT FOLLOWING THE PLAN AND DESCRIBE THE ACTIONS TAKEN F	
DESCRI REPOR	BE ANY CHANGES IN TANKS, RECTIFIERS, CONTROL DEVICES, MONITORING, ETC. SINCE THE LA	ST STATUS
ADDITIO	ONAL COMMENTS:	
ALL SO	URCES: CHECK ONE	
9	I CERTIFY THAT THE WORK PRACTICE STANDARDS IN 40 CFR 63.342(f) WERE FOLLOWED IN ACCURATE AND MAINTENANCE PLAN ON FILE; AND, THAT THE INFORMATION CONTAINED ACCURATE AND TRUE TO THE BEST OF MY KNOWLEDGE.	
9	THE WORK PRACTICE STANDARDS IN 40 CFR 63.342(f) WERE NOT FOLLOWED IN ACCORDANCE OPERATION AND MAINTENANCE PLAN ON FILE, AS EXPLAINED ABOVE AND/OR ON ATTACHED.	WITH THE
	Submitted by:	
	Title/Position:	
	Signature:	
	Date:	

Attach a signed certification to complete this report.

## Indiana Department of Environmental Management Office of Air Management

## Technical Support Document (TSD) for a New Source Construction and Minor Source Operating Permit

#### **Source Background and Description**

Source Name: Delta Faucet Company

Source Location: 1425 West Main Street, Greensburg, Indiana 47240

County: Decatur SIC Code: 3432

Operation Permit No.: MSOP 031-11706-00007
Permit Reviewer: CarrieAnn Ortolani

The Office of Air Management (OAM) has reviewed an application from Delta Faucet Company relating to the construction and operation of a chrome faucet electroplating source.

## **Permitted Emission Units and Pollution Control Equipment**

The source consists of the following permitted emission units and pollution control devices and emission units and control devices that did not require permits under 326 IAC 2-1, but require permits under 326 IAC 2-5 and 326 IAC 2-6:

- (a) One (1) decorative chromium electroplating bath, identified as T27, constructed prior to December 16, 1993, equipped with a wet scrubber and exhausting at stack 1038Cr.
- (b) One (1) decorative chromium electroplating bath, identified as T23, constructed prior to December 16, 1993, equipped with a wet scrubber and exhausting at stack 281Cr.
- (c) One (1) nickel electroplating bath, identified as T23, equipped with a wet scrubber and exhausting at stack 1038Ni.
- (d) One (1) nickel electroplating bath, identified as T18, equipped with a wet scrubber and exhausting at stack 281Ni.
- (e) One (1) copper plating tank, identified as 1038, equipped with a wet scrubber and exhausting at stack 1038Cu.
- (f) One (1) cyanide plating tank, identified as T18, equipped with a wet scrubber and exhausting at stack 574.
- (g) One (1) formaldehyde electroless plating tank, identified as EC Tank T12/T13, equipped with a wet scrubber and exhausting at stack 489.

- (h) One (1) Brite Dip tank, identified as T14, equipped with a wet scrubber and exhausting at stack 1715.
- (i) Two (2) rack strip lines, identified as 255R and 255P, using sulfuric acid and nitric acid and equipped with wet scrubbers and exhausting at stacks 255R and 255P.
- (j) Buffing operations, equipped with three (3) air washers, identified as 2125, 2490 and 3011, and exhausting at stacks 2126, 2491 and 3011, respectively.
- (k) Brazing operations, identified as 10200, exhausting at stacks 1183, 1873, 1874, 1212 and 1105, capacity: 10.3 pounds per hour of solder, 1,800 pounds per hour of brass or copper parts, and 5.72 million British thermal units per hour.
- (I) One (1) cure oven, identified as 569, fired by natural gas and exhausting at stacks 569 North and 569 South, capacity: 3.6 million British thermal units per hour.
- (m) One (1) natural gas fired fluidized bed burn-off oven, rated at 0.99 million British thermal units per hour (mmBtu/hr), with No. 4 fuel oil as alternative fuel, with a maximum capacity of 301 pounds per hour of parts and 1.56 pounds per hour of sand, using a cyclone for particulate matter control, and exhausting at one (1) stack identified as 2918.
- (n) One (1) powder spray booth, identified as 1421, equipped with a baghouse and exhausting to stack 1421, capacity: 20 pounds of powder per hour.
- (o) One (1) boiler, identified as 1854, constructed in 1993, fired by natural gas and exhausting at stack 1854, capacity: 2.10 million British thermal units per hour.
- (p) Two (2) boilers, identified as 1307 and 1308, constructed in 1987, fired by natural gas and exhausting at stack 1307/1308, capacity: 0.75 million British thermal units per hour, each.
- (q) One (1) boiler, identified as 586, constructed in 1975, fired by natural gas and using no. 4 fuel oil when required by the gas utility, exhausting at stack 586, capacity: 25.20 million British thermal units per hour.
- (r) One (1) boiler, identified as 1513, constructed in 1990, fired by natural gas, exhausting at stack 1513, capacity: 32.94 million British thermal units per hour.

#### **Unpermitted Emission Units and Pollution Control Equipment**

The source also consists of the following unpermitted facilities/units:

(s) One (1) boiler, identified as 2256, constructed in 1994, fired by natural gas, exhausting at stack 2256, capacity: 14.70 million British thermal units per hour.

#### **New Emission Units and Pollution Control Equipment**

The application includes information relating to the construction and operation of the following equipment:

(t) One (1) decorative chromium electroplating bath, identified as T21, equipped with a wet scrubber and exhausting at stack 253Cr.

## **Existing Approvals**

The source has been operating under previous approvals including, but not limited to, the following:

- (a) OP 16-01-86-0034, issued on March 30, 1982;
- (b) Registration issued April 26, 1982;
- (c) Registration issued July 5, 1984;
- (d) Exempt construction and operation status issued October 25, 1985;
- (e) Exempt Construction and Operation Status issued May 1, 1986;
- (f) Exempt Construction and Operation Status issued August 4, 1986;
- (g) OP 16-01-90-0050, issued December 4, 1986;
- (h) PC (16) 1815, issued on January 5, 1990;
- (i) Exempt Construction and Operation Status, Permit No. 031-3044-00007, issued September 17, 1993; and
- (j) Registration CP 031-9717-00007, issued on May 28, 1998.

All conditions from previous approvals were incorporated into this permit except the following:

(a) From the Registration issued April 26, 1982

Emissions shall be at a level acceptable to 325 IAC 8-3.

Reason not incorporated:

The solvent recovery facility registered by the approval is no longer in existence at the source.

(b) From the Registration issued July 5, 1984

Emissions shall be at a level acceptable to 325 IAC 8-3.

Reason not incorporated:

The degreaser registered by the approval is no longer in existence at the source.

- (c) From PC (16) 1815, issued on January 5, 1990, Conditions 2, 3, 4, and 5:
  - Although 326 IAC 1-7-3 does not apply, the minimum stack height shall be limited to 50 feet. Air modeling analysis has demonstrated that the good engineering practice stack height provision is not required for this number 2 fuel oil containing 0.5 percent by weight sulfur content.
  - 3. Based on air modeling analysis and pursuant to 326 IAC 2-1-5, the sulfur content in the number 2 fuel oil shall be limited to 0.5 percent by weight. This restriction shall prevent an exceedance with sulfur dioxide National Ambient Air Quality Standard.

- 4. Pursuant to 326 IAC 7-1-2, sulfur dioxide emissions shall be emitted at less than 6 pounds per million Btu input.
- 5. That reports of the calendar month or annual average sulfur content, heat content, fuel consumption and sulfur dioxide emission rate in pounds per million Btu shall be submitted upon request pursuant to 326 IAC 7-1-3.

Reason not incorporated:

The boiler, identified as 1513 will only operate on natural gas.

## **Stack Summary**

Stack ID	Operation	Height	Diameter	Flow Rate	Temperature
		(feet)	(feet)	(acfm)	(EF)
1513	Boiler	42.9	2.5	4,263	214
586	Boiler	32.7	1.7	3,197	220
2256	Boiler	32.7	2.0	1,865	210
1854	Boiler	40.6	1.3	267	220
1307/1308	Boiler	20.7	1.2	1,500	190
1183	Brazing	25.1	2.7	5,131	118
1873	Brazing	25.1	3.5	5,131	99
1874	Brazing	25.1	3.5	20,970	100
1212	Brazing	25.1	2.7	17,124	88
1105	Brazing	21.1	1.8	6,740	90
569 South	Cure Oven	22.0	1.0	1,614	220
569 North	Cure Oven	22.2	0.8	754	195
1038Cr	Chrome Scrubber	40.6	1.0	805	55
1038Ni	Nickel Scrubber	40.6	1.3	3,078	60
281Cr	Chrome Scrubber	26.6	1.7	500	80
281Ni	Nickel Scrubber	31.6	2.5	3,078	65
253Cr	Chrome Scrubber	unknown	unknown	unknown	unknown
489	Formaldehyde Scrubber	32.1	1.3	4,827	56
574	Cyanide Scrubber	28.6	1.7	8,898	70
1715	Bright Dip Scrubber	30.6	3.0	21,055	71
255P	Sulfuric Scrubber	31.1	2.0	1,375	55
255R	Nitric Scrubber	26.6	1.3	1,014	64
1038Cu	Copper Scrubber	40.6	1.3	3,690	55
1421	Powder Coating Baghouse	28.6	1.2	1,657	51
2918	Fluidized Bed	32.0	0.75	2,850	250
2491	Buffing Air Washer	39.6	2.8	27,752	70
2126	Buffing Air Washer	38.6	3.0	42,961	75
3011	Buffing Air Washer	32.1	3.0	48,000	66

#### **Enforcement Issue**

- (a) IDEM is aware that equipment has been constructed and operated prior to receipt of the proper approval. The subject equipment is listed in this Technical Support Document under the condition entitled *Unpermitted Emission Units and Pollution Control Equipment*.
- (b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

#### Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on December 27, 1999. Additional information was received on January 31, 2000, via telephone and facsimile, and February 22, 2000 via telephone.

#### **Emission Calculations**

Chromium emissions (Single HAP) from the biggest chromium electroplating source in Indiana are less than ten (10) tons per year and Delta Faucet Company is a much smaller source in comparison. Therefore, no emission calculations were necessary for the chromium electroplating because the chromium emissions from this source will be less than ten (10) tons per year. The emissions from nickel, copper, zinc cyanide, copper cyanide and sodium cyanide electroplating are not calculated for the same reason. See Appendix A (pages 1 through 9 of 9) of this document for detailed emissions calculations for all other operations.

## **Potential To Emit**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	41.5
PM <sub>10</sub>	43.0
SO <sub>2</sub>	58.5
VOC	3.27
CO	31.7
NO <sub>x</sub>	43.7

HAPs	Potential To Emit (tons/year)
Chromium	<10
Nickel	<10
Cyanide Compounds	<10
Formaldehyde	0.567
Methanol	0.648
Benzene	7.88E-4
Dichlorobenzene	4.51E-4
Hexane	0.676
Toluene	1.28E-3
Lead	1.16E-3
Cadmium	6.36E-4
Manganese	7.89E-4
Arsenic	4.59E-4
Beryllium	3.44E-4
Mercury	3.44E-4
Selenium	1.73E-3
TOTAL	< 25

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of each criteria air pollutant is less than 100 tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination HAPS is less than twenty-five (25) tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.
- (c) The potentials to emit (as defined in the Indiana Rule) of  $NO_X$ ,  $SO_2$ , PM and  $PM_{10}$  are equal to or greater than 25 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-5 and 326 IAC 2-6.
- (d) The existing source is subject to 326 IAC 20-8 but not subject to 326 IAC 2-5.5-1(b)(2) (registration) because the source uses hexavalent chromium for decorative coating instead of trivalent chromium and the source emits less than major source levels (see statement (b) above). Therefore, the source is subject to the provisions of 326 IAC 2-6.1-3(a).

## **Actual Emissions**

The following table shows the actual emissions from the source. This information reflects the 1990 OAM emission data. These actual emissions are no longer representative of the source.

Pollutant	Actual Emissions (tons/year)
PM	0.00
PM <sub>10</sub>	0.00
SO <sub>2</sub>	0.00
VOC	13.5
CO	0.00
NO <sub>x</sub>	0.00
HAP	not given

## **Limited Potential to Emit**

The table below summarizes the total potential to emit, reflecting all limits and pollution control devices, of the significant emission units.

	Limited Potential to Emit (tons/year)						
Process/facility	PM	PM <sub>10</sub>	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPS
Two (2) decorative chromium electroplating baths (T27 and T23)	0.0	0.0	0.0	0.0	0.0	0.0	<10
Two (2) nickel electroplating baths, one (1) copper electroplating bath, one (1) cyanide plating bath, two (2) rack strip lines, one (1) formaldehyde tank and one (1) Brite dip tank, one (1) fluidized bed burn-off oven, buffing operations, brazing operations and one (1) cure oven	0.562	0.794	2.31	1.43	3.59	5.45	<10
One (1) powder spray booth	1.53	1.53	0.00	0.00	0.00	0.00	0.00
Six (6) boilers	2.01	3.29	56.1	1.84	28.1	38.2	< 1.0
One (1) decorative chromium electroplating bath (T21)	0.0	0.0	0.0	0.0	0.0	0.0	<10
Total Emissions	4.11	5.62	58.4	3.27	31.7	43.7	< 10 each individual HAP; < 25 total HAPs

## **County Attainment Status**

The source is located in Decatur County.

Pollutant	Status
PM <sub>10</sub>	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO<sub>X</sub>) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Decatur County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO<sub>X</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Decatur County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

#### **Source Status**

Existing Source PSD, Part 70 or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)		
PM	4.11		
PM <sub>10</sub>	5.62		
SO <sub>2</sub>	58.4		
VOC	3.27		
CO	31.7		
NO <sub>x</sub>	43.7		

- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.
- (b) These emissions were based on the limited potential to emit table in this document. The 1990 emissions from the AIRS Facility Quick Look Report are not used in this table because they are not currently representative of the source.

## **Proposed Modification**

PTE from the proposed modification, which is one (1) decorative chromium electroplating bath, and the PTE from the unpermitted boiler (based on 8,760 hours of operation per year at rated capacity including enforceable emission control and production limit, where applicable):

Pollutant	PM (ton/yr)	PM <sub>10</sub> (ton/yr)	SO <sub>2</sub> (ton/yr)	VOC (ton/yr)	CO (ton/yr)	NO <sub>x</sub> (ton/yr)
Proposed Modification	0.122	0.489	0.039	0.354	5.41	6.44
PSD Threshold Level	250	250	250	250	250	250

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

#### **Part 70 Permit Determination**

326 IAC 2-7 (Part 70 Permit Program)

This existing source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPS is less than 25 tons per year.

This status is based on all the air approvals issued to the source and all information included in the permit application.

#### **Federal Rule Applicability**

- (a) The one (1) natural gas-fired process boiler, known as 1513, rated at 32.94 million British thermal units per hour is subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.40c, Subpart Dc because it was installed after the June 9, 1989 applicability date and is rated between 10 and 100 million British thermal units per hour. Since the boiler only operates on natural gas, there are no applicable standards under 40 CFR 60.42c. The source shall record the amount of fuel used pursuant to 40 CFR 60.48c(g).
- (b) The one (1) natural gas-fired process boiler, known as 2256, rated at 14.70 million British thermal units per hour is subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.40c, Subpart Dc because it is was installed after the June 9, 1989 applicability date and is rated between 10 and 100 million British thermal units per hour. Since the boiler only operates on natural gas, there are no applicable standards under 40 CFR 60.42c. The source shall record the amount of fuel used pursuant to 40 CFR 60.48c(g).
- (c) The one (1) process boiler, known as 586, rated at 25.20 million British thermal units per hour is not subject to the New Source Performance Standards, 326 IAC 12, 40 CFR 60.40, 40 CFR 60.40a, 40 CFR 60.40b and 40 CFR 60.40c, Subparts D, Da, Db and Dc because it was installed prior to September 18,1978 and has a capacity less than 250 million British thermal units per hour.

- (d) The one (1) process boiler, known as 1854, rated at 2.10 million British thermal units per hour, and the two (2) boilers, known as 1307 and 1308, rated at 0.75 million British thermal units per hour, each, are not subject to the New Source Performance Standards, 326 IAC 12, 40 CFR 60.40, 40 CFR 60.40a, 40 CFR 60.40b and 40 CFR 60.40c, Subparts D, Da, Db and Dc because they each have a capacity less than 10 million British thermal units per hour.
- (e) The chromium electroplating operations are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAPs), 326 IAC 14, (40 CFR 63, Subpart N, and 326 IAC 20-1-1). Pursuant to 40 CFR 63, Subpart N, and 326 IAC 20-1-1, the chromium electroplating operations are subject to the following conditions:

The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR 63 Subpart N.

- (1) The surface tension of the chromium electroplating bath contained with the tank shall not exceed forty-five (45) dynes per centimeter at any time during the operation of the tank if a chemical fume suppressant containing a wetting agent is used to demonstrate compliance.
- (2) Each time that surface tension monitoring exceeds forty-five (45) dynes per centimeter, the frequency of monitoring must revert back to every four (4) hours of tank operation. After forty (40) hours of monitoring tank operation every four (4) hours with no exceedances, surface tension measurement may be conducted once every eight (8) hours of tank operation. Once there have been no exceedances during forty (40) hours of tank operation, surface tension measurement may be conducted once every forty (40) hours of tank operation on an ongoing basis, until an exceedance occurs.
- (3) An alternative emission limit of 0.01 milligram per day standard cubic meter (mg/dscm) will be applicable if the chromium electroplating bath does not meet the limit above.
- (4) A summary report shall be prepared to document the ongoing compliance status of the chromium electroplating operation. This report shall be completed annually, retained on site, and made available to IDEM upon request. If there are significant exceedance of chromium air emission limits (as defined in 40 CFR Part 63.347 (h)(2)), then semiannual reports shall be submitted to:

Indiana Department of Environmental Management Air Compliance Branch, Office of Air Management Chromium Electroplating 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206

(5) The chromium electroplating operations shall be subject to the record keeping and reporting requirement as indicated in the chromium electroplating NESHAP.

## State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is located in Decatur County and the potentials to emit VOC, CO,  $PM_{10}$ ,  $SO_2$  and  $NO_X$  are less than one hundred (100) tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### State Rule Applicability - Individual Facilities

326 IAC 6-2-3 (Particulate Emissions Limitations for Facilities Constructed prior to September 21, 1983)

The one (1) boiler, known as 586, constructed in 1975, with a total heat input capacity of 25.20 million British thermal units per hour, must comply with the PM emission limitation of 326 IAC 6-2-3. This limitation is based on the following equation is given in 326 IAC 6-2-3:

Pt = 
$$C \times a \times h / 76.5 \times Q^{0.75} \times N^{0.25}$$

where:

- Pt = Pounds of particulate matter emitted per million British thermal units (lb/MMBtu) heat input
- Q = Total source maximum operating capacity rating in million British thermal units per hour (MMBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.
- C = Maximum ground level concentration with respect to distance from the point source at the "critical" wind speed for level terrain. This shall equal 50 micrograms per cubic meter for a period not to exceed a sixty (60) minute time period.
- N = Number of stacks in fuel burning operation.
- a = Plume rise factor which is used to make allowance for less than theoretical plume rise. The value 0.67 shall be used for Q less than or equal to 1,000 mmBtu/hr heat input. The value 0.8 shall be used for Q greater than 1,000 mmBtu/hr heat input.
- h = Stack height in feet.

For the one (1) boiler:

Pt =  $50 \times 0.67 \times 32.7 / 76.5 \times (25.20)^{0.75} \times 1^{0.25} = 1.27 \text{ lb/MMBtu}$ 

Pursuant to 326 IAC 6-2-3(e), for Q less than 250 million British thermal units per hour, Pt shall not exceed 0.6 pound per million British thermal units. Therefore, the one (1) boiler is limited to emissions of 0.6 pound per million British thermal units.

Based on Appendix A, the potential to emit PM emissions from the one (1) boiler limited to 0.6 pound PM per million British thermal units is higher when operating on no. 2 fuel oil and is:

 $1.58 \text{ tons/yr} \times (2000 \text{ lbs/ton } / 8760 \text{ hrs/yr}) = 0.361 \text{ lbs/hr}$ (0.361 lbs/hr / 25.20 MMBtu/hr) = 0.014 lbs PM per MMBtu

Therefore, the one (1) boiler identified as 586 will comply with this rule.

326 IAC 6-2-4 (Particulate Emissions Limitations for Facilities Constructed after September 21, 1983)

The five (5) boilers, known as 1513, 2256, 1854, 1307 and 1308, all constructed after September 21, 1983, must comply with the requirements of 326 IAC 6-2-4. The emission limitations are based on the following equation is given in 326 IAC 6-2-4:

 $Pt = 1.09/Q^{0.26}$ 

where:

- Pt = Pounds of particulate matter emitted per million British thermal units (lb/MMBtu) heat input
- Q = Total source maximum operating capacity rating in million British thermal units per hour (MMBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

## Two (2) boilers, 1307 and 1308, constructed in 1987

The heat input capacities of the two (2) boilers are 0.75 million British thermal units per hour, each. There was one (1) boiler rated at 25.20 million British thermal units per hour in operation when these boilers were constructed.

Pt =  $1.09/(26.7)^{0.26}$  = 0.46 lb/MMBtu heat input

Based on Appendix A, the potential PM emission rate is:

 $0.006 \text{ ton/yr} \times (2000 \text{ lbs/ton} / 8760 \text{ hrs/yr}) = 0.001 \text{ lb/hr}$ (0.001 lb/hr / 0.75 MMBtu/hr) = 0.002 lb PM per MMBtu

Therefore, the two (2) boilers, 1307 and 1308, constructed in 1987, will comply with this rule.

## One (1) boiler, 1513, constructed in 1990

The heat input capacity of the boiler is 32.94 million British thermal units per hour. The total heat input capacity of the source prior to the construction of this boiler was 26.7 million British thermal units per hour.

Pt =  $1.09/(59.64)^{0.26}$  = 0.38 lb/MMBtu heat input

Based on Appendix A, the potential PM emission rate is:

 $0.274 \text{ ton/yr} \times (2000 \text{ lbs/ton } / 8760 \text{ hrs/yr}) = 0.063 \text{ lb/hr}$ (0.063 lb/hr / 32.94 MMBtu/hr) = 0.002 lb PM per MMBtu

Therefore, the one (1) boiler, 1513, constructed in 1990, will comply with this rule.

#### One (1) boiler, 1854, constructed in 1993

The heat input capacity of the boiler is 2.10 million British thermal units per hour. The total heat input capacity of the source prior to the construction of this boiler was 59.64 million British thermal units per hour.

Pt =  $1.09/(61.74)^{0.26}$  = 0.37 lb/MMBtu heat input

Based on Appendix A, the potential PM emission rate is:

 $0.017 \text{ ton/yr} \times (2000 \text{ lbs/ton} / 8760 \text{ hrs/yr}) = 0.004 \text{ lb/hr}$ (0.004 lb/hr / 2.10 MMBtu/hr) = 0.002 lb PM per MMBtu

Therefore, the one (1) boiler, 1854, constructed in 1993, will comply with this rule.

#### One (1) boiler, 2256, constructed in 1994

The heat input capacity of the boiler is 14.70 million British thermal units per hour. The total heat input capacity of the source prior to the construction of this boiler was 61.74 million British thermal units per hour.

Pt =  $1.09/(76.44)^{0.26}$  = 0.35 lb/MMBtu heat input

Based on Appendix A, the potential PM emission rate is:

 $0.122 \text{ ton/yr} \times (2000 \text{ lbs/ton } / 8760 \text{ hrs/yr}) = 0.028 \text{ lb/hr}$ (0.028 lb/hr / 14.70 MMBtu/hr) = 0.002 lb PM per MMBtu

Therefore, the one (1) boiler, 2256, constructed in 1994, will comply with this rule.

#### 326 IAC 6-3-2 (Process Operations)

- (a) The particulate matter (PM) from the buffing operations shall be limited to less than 0.551 pounds per hour when operating of a process weight rate of less than 100 pounds per hour. Since the potential to emit PM before controls is 0.000002 pounds per hour, the buffing operations will comply with this rule.
- (b) The particulate matter (PM) from the fluidized bed burn off oven shall be limited to less than 1.15 pounds per hour, when operating at a process weight rate of 303 pounds per hour. Since the potential to emit after control by the cyclone is 0.076 pounds per hour, the fluidized bed burn off oven will comply with this rule. The cyclone shall be in operation at all times the fluidized bed burn off oven is in operation in order to comply with this limit.

These limits were computed using the following equation:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$
 where  $E =$  rate of emission in pounds per hour and  $P =$  process weight rate in tons per hour

(c) The particulate matter (PM) from the powder spray booth and the particulate matter (PM) from the brazing operations shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$
 where  $E =$  rate of emission in pounds per hour and  $P =$  process weight rate in tons per hour

The baghouse (1421) must be in operation at all times when the powder spray booth is in operation in order to comply with this limit.

## 326 IAC 7 (Sulfur Dioxide Emission Limitations)

Since the potential to emit  $SO_2$  from the one (1) boiler, Boiler 586, which can operate on fuel oil when required by the natural gas utility can be greater than 25 tons per year, the requirements of 326 IAC 7 are applicable to that boiler. The sulfur dioxide emissions from the boiler shall be limited to five-tenths (0.5) pounds per million British thermal units. The boiler will be in compliance with this rule when the weight percent sulfur is less than or equal to five-tenths (0.5). Therefore, this boiler is in compliance with the rule. This is calculated as follows:

56.0 tons  $SO_2$  per year x (2,000 lbs/ton / 8,760 hrs/yr) = 12.8 lbs/hr 12.8 lbs/hr / 25.20 MMBtu/hr = 0.5 lb  $SO_2$  / million British thermal units

## **Air Toxic Emissions**

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Construction Permit Application Form Y.

This source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Clean Air Act Amendments.

#### Conclusion

The construction and operation of this chrome faucet electroplating source shall be subject to the conditions of the attached proposed New Source Construction and Minor Source Operating Permit 031-11706-00007.

## Indiana Department of Environmental Management Office of Air Management

Addendum to the Technical Support Document for New Construction and Operation

Source Name: Delta Faucet Company

Source Location: 1425 West Main Street, Greensburg, Indiana 47240

County: Decatur

Construction Permit No.: MSOP 031-11706-00007

SIC Code: 3432

Permit Reviewer: CarrieAnn Ortolani

On March 17, 2000, the Office of Air Management (OAM) had a notice published in the Greensburg Daily News, Greensburg, Indiana, stating that Delta Faucet Company had applied for a construction permit to construct and operate a chrome faucet electroplating source with scrubbers, air washers, a baghouse, and a cyclone as air pollution controls for the source. The notice also stated that OAM proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On April 14, 2000, Russell Parks, Manager - Environmental Services of Delta Faucet Company, submitted comments on the proposed construction permit. The summary of the comments and corresponding responses are as follows: The permit language, if changed, has deleted language as strikeouts and new language **bolded**.

#### **General Comments**

#### Comment 1:

The Federal EPA deferred permitting NESHAP minor/area sources of chrome electroplating until December 2004. Contrary to this decision, the IDEM requested permit applications from facilities with chrome plating operations. The Company completed the extensive permit application and submitted it in late 1999. The EPA's decision to defer such a requirement was based on a thorough evaluation of the level of pollutants emitted by the minor/area sources, with the obvious conclusion that the emissions did not presently warrant the issuance of permits. Therefore, the Company feels the issuance of an operating permit prior to the deferral date is premature, and could result in having to go through extensive amendments once EPA's recommended permit conditions are finalized.

## Response 1:

The high toxicity of this regulated pollutant results in significant health impacts in the many communities of Indiana located near sources of chromium mist. IDEM is unaware of any information that contradicts studies released by U.S. EPA that link exposure to chromium in the ambient air with cancer. IDEM believes there is valid justification for requiring these sources of airborne hexavalent chromium to obtain a Minor Source Operating Permit (MSOP). IDEM's MSOP requirement for chrome sources provides a simpler and cheaper permit process than the Title V permitting process.

To sustain the effectiveness of Indiana's compliance assistance program for chromium emissions is IDEM's goal. A single reference document readily available to all interested parties that explains all major site-specific requirements should minimize future confusion. It will help to ensure that noncompliance is minimized.

#### Comment 2:

As noted above, the Minor Source Operating Permit (MSOP) application was required of the facility due only to the operation of chrome plating. The facility completed all required forms, including detailed information on operations that previously did not require a permit. Such units are now included in the proposed permit as regulated. The resulting perception is one of the Delta Faucet Company (and like companies) being unduly targeted for additional regulatory burdens. No other facilities with like insignificant sources are being asked to submit a MSOP application.

## Response 2:

Delta Faucet Company received approvals in the past for the operations at this source. Taking into account the changes documented in this addendum, the six (6) boilers have a potential to emit  $NO_{\chi}$  greater than 25 tons per year and the total of all operations have a potential to emit more than 25 tons per year of PM and  $PM_{10}$ . Therefore, this source needs a Minor Source Operating Permit without considering the chromium electroplating.

#### Comment 3:

Considering the fact that this is intended to be a Minor Source Operating Permit, the level of record keeping, plan preparation, and reporting requirements are more indicative of a Title V Operating Permit. The facility went from having registration on a few units to having a permit with detailed, numerous, and onerous requirements, with essentially no modification of equipment or production.

#### Response 3:

A Minor Source Operating Permit issued under 326 IAC 2-6.1 has more record keeping and reporting requirements than registrations issued in the past. Pursuant to 326 IAC 2-6.1-5(a)(2), permits or permit revisions issued under this rule shall contain monitoring, testing, reporting, and record keeping requirements that assure reasonable information is provided to evaluate compliance consistent with the permit terms and conditions, the underlying requirements of this title and the CAA. Such requirements shall be in accordance with 326 IAC 3 and other applicable regulations. The reporting requirements in Section C of the MSOP were determined applicable to all Minor Sources. The record keeping and reporting requirements in Sections D.1, D.5, D.6, and D.7 are required by applicable National Emission Standards for Hazardous Air Pollutants or New Source Performance Standards. The other monitoring and recordkeeping contained in the draft permit has been removed from the final permit.

## Comment 4:

Each emission unit is described and listed in the permit. Most of the air emission sources are insignificant or minor. Indiana regulations identified these units as requiring registration only (with the exception of NESHAP).

## Response 4:

Pursuant to 326 IAC 2-6.1, this source requires a Minor Source Operating Permit. This type of permit is for the entire source. The source status is determined by the potential to emit of the total of all emission units and not by the potential to emit of the individual units.

#### Comment 5:

The permit issued is a "Minor Source Operating" and "Construction" Permit. It was our understanding that all electroplating operations were only required to obtain a minor source operating permit (326 IAC 2-6.1-2).

## Response 5:

The "construction permit" language refers to the unpermitted boiler at this source.

#### **Detailed Comments**

#### Comment 6:

The Public Notice, as written, gives the impression that the scrubbers, air washers, baghouse, and cyclone are all connected to the chrome electroplating sources.

## Response 6:

The Public Notice is no longer being posted. Any misleading wording was not done intentionally.

#### Comment 7:

The Public Notice document indicates that the boiler installed in 1994 (#2256) was required to have been registered prior to its construction and operation. Upon review of the Indiana rules requiring registration or a permit for new sources (326 IAC 2-5.1-2 and 5.1-3), the potential emissions (from the Technical Support Document) from this natural gas fired unit are not at levels that would trigger either requirement.

#### Response 7:

Pursuant to 326 IAC 2-1-1(b)(2)(A)(ii)(CC), which was in effect in 1994 and has since been repealed, the boiler, 2256, required a registration, because the boiler can emit more than twenty-five (25) pounds per day of  $NO_x$ .

## Comment 8:

Page 6 of 42. A.2:

- (i) The equipment description is more accurately stated as "Two (2) rack strip lines, identified as 255R and 255P, using nitric acid and sulfuric acid, respectively, and equipped with wet scrubbers and exhausting at stacks 255R and 255P, respectively."
- (m) The fluidized bed cannot use fuel oil of any kind.
- (q) This boiler can no longer burn fuel oil of any kind (effective April 14, 2000)

## Response 8:

The facility description for Section A.2(i) and item (i) of the Emissions Unit Description Box in Section D.2 has been revised as follows:

(i) Two (2) rack strip lines, identified as 255R and 255P, using sulfuric acid and nitric acid, respectively, and equipped with wet scrubbers and exhausting at stacks 255R and 255P, respectively.

The one (1) fluidized bed burn-off oven was permitted in Registration CP 031-9717-00007, issued on May 28, 1998, to operate on no. 4 fuel oil as alternative fuel. Since the oven will not operate on fuel oil, Section A.2(m) and item (m) of the Emissions Unit Description Box in Section D.2 have been revised as follows:

(m) One (1) natural gas fired fluidized bed burn-off oven, rated at 0.99 million British thermal units per hour (mmBtu/hr), with No. 4 fuel oil as alternative fuel, with a maximum capacity of 301 pounds per hour of parts and 1.56 pounds per hour of sand, using a cyclone for particulate matter control, and exhausting at one (1) stack identified as 2918.

Section A.2(q) and item (q) of the Emissions Unit Description Box in Section D.5 have been revised as follows:

(q) One (1) boiler, identified as 586, constructed in 1975, fired by natural gas and using no. 4 fuel oil when required by the gas utility, exhausting at stack 586, capacity: 25.20 million British thermal units per hour.

#### Comment 9:

Page 8 of 42. B.7 - This section should not apply since these are not new sources.

#### Response 9:

Condition B.7 has been removed from the permit as follows:

#### B.7 NSPS Reporting Requirement

Pursuant to the New Source Performance Standards (NSPS), Part 60. 40c, Subpart Dc, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

- (a) Commencement of construction date (no later than 30 days after such date);
- (b) Anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
- (c) Actual start-up date (within 15 days after such date); and
- (d) Date of performance testing (at least 30 days prior to such date), when required by a condition elsewhere in this permit.

Reports are to be sent to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, IN 46206-6015

The application and enforcement of these standards have been delegated to the IDEM OAM. The requirements of 40 CFR Part 60 are also federally enforceable.

#### Comment 10:

Page 9 of 42, C.2, and Page 19 of 42, D.1.3, D.1.4 - A preventative maintenance type plan should only be required of the regulated source(s), or those that trigger the need for the permit application (i.e. the chrome electroplating tanks). The requirement to have both a Preventative Maintenance Plan (PMP) and an Operation and Maintenance Plan (OMP) is overly burdensome and redundant. The OMP is a requirement of the NESHAP and should be an acceptable alternative to the PMP.

## Response 10:

Preventive Maintenance Plans are required by 326 IAC 1-6-3. The final permit requires PMPs for only the facilities subject to the Chrome NESHAP. All other references to PMPs have been deleted from the final permit.

#### Comment 11:

Page 10 of 42. C.4 - Entry should also be contingent upon IDEM, OAM, U.S. EPA, or other authorized representative complying with all applicable Safety Regulations and having an authorized Facility Representative present.

## Response 11:

IDEM, OAM, intends to comply with all safety precautions used at each source. As indicated in Condition C.4(c), inspection must take place at reasonable times.

#### Comment 12:

Page 11 of 42 C.7, C.9 - Opacity limitations and associated monitoring for natural gas fired sources is inappropriate. Similarly, the stack height provisions are not applicable to this operation.

## Response 12:

Pursuant to 326 IAC 5-1, Condition C.7, Opacity Limitations, is applicable to all facilities and sources. Condition C.9 is only applicable to stacks with a potential emissions of 25 tons per year of PM before controls. One such stack was Stack 1421 for the powder coating. Pursuant to 326 IAC 1-7-5, all sources having less than twenty-five (25) tons per year of actual emissions (after controls) shall be exempt from the requirements specified in 326 IAC 1-7-3(a), GEP stack height. However, the requirements of 326 IAC 1-7-4, Stack height provisions: ambient air quality modeling, are still applicable. Since the actual PM emissions from the powder coating are less than 25 tons per year, the requirements of 326 IAC 1-7-4 are applicable. The requirements of 326 IAC 1-7-4 are applicable when determining the acceptable stack height for use in air quality monitoring. As a result of Comment 22, it has been determined that the potential emissions from the powder coating are less than 25 tons per year (See page 1 of 1 of TSD Addendum Appendix A). Therefore, Condition C.9 is removed and the remainder of Section C is renumbered accordingly. Condition C.9 is removed as follows:

## C.9 Stack Height [326 IAC 1-7]

for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using ambient air quality modeling pursuant to 326 IAC 1-7-4.

#### Comment 13:

Page 11 of 42. C.8 - The farmland owned by Delta Faucet Company should be exempted from the fugitive dust issue of this permit.

## Response 13:

Pursuant to 326 IAC 6-4-1, fugitive dust means the generation of particulate matter to the extent that some portion of the material escapes beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located. This rule is applicable to all sources of particulate matter emissions. Exemptions to this rule are listed in 326 IAC 6-4-6 and include an exemption for fugitive dust generated from agricultural operations providing every reasonable precaution is taken to minimize emissions and providing operations are terminated if a severe health hazard is generated because of prevailing meteorological conditions.

#### Comment 14:

Page 11 of 42 C.10 and Page 13 of 42 C.14 - In accordance with Sec. D.2.3, stack testing is not required. Both of these sections are not applicable to the operation and should be removed.

#### Response 14:

As stated in Condition C.10(a), now C.9(a), compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. Since no performance testing is required in Section D, there are no applicable requirements in these conditions, C.10 and C.14, now C.9 and C.13. Since performance testing may be required in the future for existing or new emission units, these conditions will remain in the permit.

#### Comment 15:

Page 12 of 42 C.13 - The requirement to develop and maintain such a plan is excessive and not consistent with this facility being a minor source of pollutants and the permit not being a Title V permit. The facility is in compliance with the NESHAP requirements, which already requires monitoring and measurement data (i.e., compliance monitoring data) to be collected and available for review.

#### Response 15:

See Response 10 for justification on why Condition C.12, formerly C.13, Compliance Monitoring Plan, is required.

#### Comment 16:

Page 14 of 42 C.15 - The Malfunctions Report should only be required for the regulated source(s),

or those that trigger the need for the permit application (i.e. the chrome electroplating tanks).

## Response 16:

Pursuant to 326 IAC 1-6-1, the requirements of 326 IAC 1-6 apply to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1. Since this source is required to obtain a permit pursuant to 326 IAC 2-6.1, Condition C.15, now Condition C.14, Malfunctions Report, is applicable to the entire source.

#### Comment 17:

Page 15 of 42 C.17 - The referenced Indiana rule (326 IAC 2-6.1-2) only discusses the applicability of obtaining a minor source permit. It does not discuss record keeping requirements. The requirements outlined in this section are excessive, and beyond what is needed to "assure reasonable information is provided to evaluate compliance", which is what is required for a MSOP (326 IAC 2-6.1-5). This section should be removed from the permit.

## Response 17:

Pursuant to 326 IAC 2-6.1-5(a)(2), permits or permit revisions issued under this rule shall contain monitoring, testing, reporting, and record keeping requirements that assure reasonable information is provided to evaluate compliance consistent with the permit terms and conditions, the underlying requirements of this title and the CAA. Such requirements shall be in accordance with 326 IAC 3 and other applicable regulations. The General Record Keeping Requirements condition, now C.16, gives instructions on how to maintain records required by Section D of the MSOP.

## Comment 18:

Page 15 of 42 C.18 - Similar to item 11, the requirement to submit a semi-annual compliance monitoring report is overly burdensome and duplicative. The information in the report will already be captured in the Malfunctions Report and the annual notification required by 326 IAC 2-6.1-5(a)(5). The referenced Indiana rules (326 IAC 2-1.1-11 and 326 IAC 2-6.1-2) do not mention a semi-annual report. The section should be removed from the permit.

#### Response 18:

The Semi-annual Compliance Monitoring Report is for the reporting of deviations from Compliance Monitoring Requirements. The Annual Notification will state whether or not the source is in operation and in compliance with all of the terms and conditions contained in this permit. When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAM, using the Malfunction Report Forms. Thus, the Malfunction Report is for timely notification of problems with the emissions units and control devices. Each report serves a separate purpose. There are no changes to the permit as a result of this comment.

#### Comment 19:

## Page 22 of 42 D.2

- (i) The equipment description is more accurately stated as "Two (2) rack strip lines, identified as 255R and 255P, using nitric acid and sulfuric acid, respectively, and equipped with wet scrubbers and exhausting at stacks 255R and 255P, respectively."
- (m) The fluidized bed can not burn any type of fuel oil.

There are many units listed here (the plating baths, etc) for which no limitations and standards identified in this section apply. These units should be removed.

1(a) The process weight for the buffing operations is greater than 100 pounds per hour, and is more accurately approximated at 1500 pounds/hr.

#### Response 19:

See Response 8. Since the actual process weight rate at the buffing operations is 1,500 pounds per hour, Condition D.2.1 is revised as follows:

## D.2.1 Particulate Matter (PM) [326 IAC 6-3-2]

- (a) The particulate matter (PM) from the buffing operations shall be limited to less than **3.38** 0.551 pounds per hour when operating of a process weight rate of **1,500** less than 100 pounds per hour.
- (b) The particulate matter (PM) from the fluidized bed burn off oven shall be limited to less than 1.15 pounds per hour, when operating at a process weight rate of 303 pounds per hour.

These limits were computed using the following equation:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$
 where  $E =$  rate of emission in pounds per hour and  $P =$  process weight rate in tons per hour

#### Comment 20:

Page 24 of 42 D - At no time does the powder spray booth run without the baghouse dust collection system operating. The true potential to emit for this unit should include such controls.

## Response 20:

Pursuant to 326 IAC 2-1.1-1, Definitions, "Potential to emit" means the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation is enforceable by the U.S. EPA, the department, or the appropriate local air pollution control agency. The term does not alter or affect the use of potential to emit for any other purpose under the CAA, (or "capacity factor" as used in Title IV of the CAA) or the regulations promulgated thereunder. Since the control device was previously not federally enforceable, the potential to emit is the potential to emit before controls. The potential to emit is also the potential to emit after controls if the control device is integral to the process. This would mean that the dust collection system is required to produce part of the product. Operating the control device at all times does not make the control device integral to the process.

## Comment 21:

The actual process weight for this process is 1000 pounds per hour. This change will result in an allowable emission level of less than 10 pounds per hours.

#### Response 21:

As a result of this new information and the information provided in Comment 22, Section A.2(n) and item (n) in the Emissions Unit Description Box in Section D.3 have been revised as follows:

(n) One (1) powder spray booth, identified as 1421, equipped with a baghouse and exhausting to stack 1421, capacity: 20 16 pounds of powder per hour and 1,000 pounds per hour of raw materials.

As a result of these changes, the Compliance Monitoring is removed because the allowable emissions are less than 10 pounds per hour. Section D.3 has been revised as follows:

#### Emission Limitations and Standards [326 IAC 2-6.1-5(1)]

## D.3.1 Particulate Matter (PM) [326 IAC 6-3-2]

The particulate matter (PM) from the powder spray booth shall be limited to 2.58 pounds per hour when operating at a process weight rate of 1,000 pounds per hour. This limitation is determined by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

The limitations were calculated using the following equation:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$  where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

#### D.3.2 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for this emissions unit and its control device.

## **Compliance Determination Requirements [326 IAC 2-1.1-11]**

#### D.3.3 2 Testing Requirements [326 IAC 2-1.1-11]

The Permittee is not required to test this emissions unit by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.3.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

#### D.3.4 3 Particulate Matter (PM)

The baghouse for PM control shall be in operation at all times when the powder spray booth is in operation.

#### Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

#### D.3.5 Visible Emissions Notations

- (a) Daily visible emission notations of the powder coating booth stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

#### D.3.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the powder spray booth, at least once weekly when the powder spray booth is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 0.05 and 1.00 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

## D.3.7 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the powder spray booth when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

#### D.3.8 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B Emergency Provisions).
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B Emergency Provisions).

#### Record Keeping and Reporting Requirement [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

## D.3.9 Record Keeping Requirements

- (a) To document compliance with Condition D.3.5, the Permittee shall maintain records of daily visible emission notations of the powder coating booth stack exhaust.
- (b) To document compliance with Condition D.3.6, the Permittee shall maintain the following:
  - (1) Daily records of the following operational parameters during normal operation when

## venting to the atmosphere:

- (A) Inlet and outlet differential static pressure; and
- (B) Cleaning cycle: frequency and differential pressure.
- (2) Documentation of all response steps implemented, per event.
- (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
- (4) Quality Assurance/Quality Control (QA/QC) procedures.
- (5) Operator standard operating procedures (SOP).
- (6) Manufacturer's specifications or its equivalent.
- (7) Equipment "troubleshooting" contingency plan.
- (8) Documentation of the dates vents are redirected.
- (c) To document compliance with Condition D.3.7, the Permittee shall maintain records of the results of the inspections required under Condition D.3.7 and the dates the vents are redirected.
- (d) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

## Comment 22:

The maximum amount of powder that can be used is 16 pounds per booth. As a result, the PTE of particulate from the booth is less than 25 tons per year.

#### Response 22:

See Response 21.

#### Comment 23:

The requirements to have a PMP, perform daily visible emission notations, perform weekly pressure drop readings, and maintain QA/QC procedures are excessive.

## Response 23:

See Response 21.

#### Comment 24:

Page 27-33 of 42 D.4-D.6.7 - The boilers at the facility have been modified such that they can no longer receive and do not burn fuel oil. The requirements identified in these sections for the gas fired boilers are excessive and overly burdensome. They should be removed from the permit.

#### Response 24:

As a result of this change, Section D.5 is revised. Rule cite changes made to Section D.5 were also made to Section D.6. Section D.5 is revised as follows:

#### Emission Limitations and Standards [326 IAC 2-6.1-5(1)]

#### D.5.1 Particulate Matter Limitation (PM) [326 IAC 6-2-3]

Pursuant to 326 IAC 6-2-3 (e) (Particulate emission limitations for sources of indirect heating: emission limitations for facilities specified in 326 IAC 6-2-1 (b)), particulate emissions from all facilities used for indirect heating purposes which have 250 million British thermal units or less heat input or less and began operation after June 8, 1972, shall in no case exceed 0.6 pound of particulate matter per million British thermal units heat input. Therefore, the one (1) boiler, identified as 586, shall be limited to PM emissions of no more than 0.6 pound per million British thermal units.

#### D.5.2 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-1]

Pursuant to (SO<sub>2</sub>-Emissions Limitations) the SO<sub>2</sub>-emissions from the thirteen (13) MMBtu per hour oil-fueled boiler shall not exceed five tenths (0.5) pounds per MMBtu heat input.

## D.5.3 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for this emissions unit.

## Compliance Determination Requirements [326 IAC 2-1.1-11]

## D.5.4 2 Testing Requirements [326 IAC 2-1.1-11]

The Permittee is not required to test this emissions unit by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance. If testing is required by IDEM, compliance with the PM and  $SO_2$  limits specified in Conditions D.5.1 and D.5.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

## D.5.5 Sulfur Dioxide Emissions and Sulfur Content

Compliance shall be determined utilizing one of the following options.

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the fuel oil sulfur content does not exceed five-tenths percent (0.5%) by weight by:
  - (1) Providing vendor analysis of fuel delivered, if accompanied by a certification; or
  - (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
    - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
    - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling; or
- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the thirteen (13) MMBtu per hour heater, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to either of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.



- (a) Visible emission notations of the boiler stack exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19] [326 IAC 2-6.1-5(a)(2)]

## D.5.7 3 Record Keeping Requirements

(a) The Permittee shall maintain monthly records of the amount and type of fuel burned in the one (1) boiler pursuant to 40 CFR 60.48c, Subpart Dc.

To document compliance with Condition D.5.2, the Permittee shall maintain records in accordance with (1) through (8) below.

- (1) Calendar dates covered in the compliance determination period;
- (2) Type of fuel combusted in the boilers;
- (3) Actual natural gas consumption in the boilers;
- (4) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions:
- (5) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period, if fuel oil is combusted that period; and

If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:

- (6) Fuel supplier certifications:
- (7) The name of the fuel supplier; and
- (8) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

- (b) To document compliance with Condition D.5.6, the Permittee shall maintain records of visible emission notations of the boiler stacks exhaust once per shift.
- (c)(b) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

## D.5.8 4 Natural Gas Fired Boiler Certification

An annual certification shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the Natural Gas Fired Boiler Certification form located at the end of this permit, or its equivalent, no later than July 1 of each year.

#### Comment 25:

Page 33 of 42 D.7 - The limitations, standards and requirements identified in this section are the same as those identified in D.1 for the other plating baths. This plating unit can be included in the previous section (D.1) and this section (D.7) removed. All comments made regarding section D.1 would still be applicable to this unit.

#### Response 25:

Section D.7 has been kept separate from D.1 because it is a new proposed unit. There is no need to combine the two (2) sections.

#### Comment 26:

Page 40 of 42 - The Natural Gas Fired Boiler Certification form should be corrected so that it does not mention "Part 70 Operating Permit". Having this form in our permit file could confuse an inspector.

## Response 26:

The title of the Natural Gas Fired Boiler Certification Form has been revised as follows:

## PART 70 MINOR SOURCE OPERATING PERMIT NATURAL GAS FIRED BOILER CERTIFICATION

## **Technical Support Document**

#### Comment 27:

Page 1 of 14 - The list of Permitted Units and Pollution Control Equipment should be modified to reflect the same changes as those mentioned previously for pages 5 and 6 of 42.

## Response 27:

The OAM prefers that the Technical Support Document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision. The fact described in this comment is noted in this Addendum to the TSD, and the permit is corrected as indicated in Response 8.

## Comment 28:

Page 5 of 14, (a) - The facility believes that the indication that boiler #2256 is an unpermitted emission unit is incorrect (see item #2 above).

## Response 28:

See Response 7.

#### Comment 29:

Page 6 of 14 (c) - The PTE of  $NO_X$ ,  $SO_2$ , PM,  $PM_{10}$  for each source are not greater than 25 tons per year. Therefore, 326 IAC 2-5 and 2-6 are not applicable.

The indication that 326 IAC 2-6 is applicable is inconsistent with that on page 11 of 14, Emission Reporting, where it indicates 326 IAC 2-6 is not applicable.

## Response 29:

Even considering boilers only operating on natural gas, the potential to emit  $NO_x$  is greater than 25 tons per year. The total potential to emit PM and PM<sub>10</sub> from the entire source is also greater than 25 tons per year. Therefore, 326 IAC 2-6.1 is applicable. The requirements of 326 IAC 2-6 and 326 IAC 2-6.1 are different. 326 IAC 2-6.1 was incorrectly referred to as 326 IAC 2-6 in the Technical Support Document. 326 IAC 2-6 is correctly referred to on page 11 of 14 of the TSD. Elsewhere, 326 IAC 2-6 should have been written as 326 IAC 2-6.1.

#### Comment 30:

Page 11 of 14 - The state rule 326 IAC 6-2-3 is not applicable as this unit is no longer capable of using fuel oil.

## Response 30:

The requirements of 326 IAC 6-2-3 are applicable to all indirect heating units regardless of the type of fuel used.

#### Comment 31:

Page 14 of 14 - The state rule 326 IAC 7 is not applicable as this unit is no longer capable of using fuel oil.

#### Response 31:

The requirements of 326 IAC 7 are no longer applicable to this source.

#### Appendix A of Technical Support Document

#### Comment 32:

Page 3 of 9 -Fuel oil is not used in any unit at the facility and this page can be removed.

#### Response 32:

The OAM prefers that the Technical Support Document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision. This change is noted.

#### Comment 33:

Page 8 of 9 - The fluidized bed does not use fuel oil.

#### Response 33:

The OAM prefers that the Technical Support Document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision. This change is noted.

#### **IDEM Changes**

Upon further review, the OAM has decided to make the following changes to the construction permit: The permit language is changed to read as follows (deleted language appears as strikeouts, new language is **bolded**):

#### D.1.1 General Provisions Relating to HAPs [326 IAC 20-1-1] [40 CFR Part 63, Subpart A]

The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-1-1, apply to tanks T27 and T23 the facility described in this section except when otherwise specified in 40 CFR 63 Subpart N.

D.1.2 Chromium Electroplating NESHAP [326 IAC 20-8-1] [40 CFR 63.342(c)&(f)] [40 CFR 63.343(a)(1) & (2)]

Tanks T27 and T23 are subject to 40 CFR Part 63, Subpart N, which is incorporated by reference as 326 IAC 20-8-1. A copy of this rule is attached.

(a) The emission limitations in this condition apply only during tank operation, and also apply during periods of startup and shutdown as these are routine occurrences for tanks subject to 326 IAC 20-8-1. The emission limitations do not apply during periods of malfunction or excess emissions, but the work practice standards that address operation and maintenance are required by this section and must be followed during malfunctions and periods of excess emissions.

- (b) During tank operation, the Permittee shall control chromium emissions discharged to the atmosphere from each tank by using a chemical fume suppressant containing a wetting agent and not allowing the surface tension of the electroplating baths contained within the tanks to exceed forty-five (45) dynes per centimeter (dynes/cm) (3.1 x 10-3 pound-force per foot [lbf/ft]) at any time during operation of the tanks.
- (c) The following work practice standards for the tanks are also applicable:
  - (1) At all times, including periods of startup, shutdown, malfunction and excess emissions, the Permittee shall operate and maintain the tanks, the fume suppressant, the packed-bed scrubber, and monitoring equipment in a manner consistent with good air pollution control practices, consistent with the Operation and Maintenance Plan (OMP) required by Condition D.1.4.
  - (2) Malfunctions and excess emissions shall be corrected as soon as practicable after their occurrence in accordance with the OMP required by Condition D.1.4.
  - (3) These operation and maintenance requirements are enforceable independent of emissions limitations or other requirements in this section.
  - (4) Determination of whether acceptable operation and maintenance procedures are being used will be based on the information available to IDEM, OAM, which may include, but is not limited to, monitoring results; review of the OMP, procedures and records; and inspection of the source.
  - (5) Based on the results of the determination made under Condition D.1.2(c)(3) above, IDEM, OAM may require that the Permittee make changes to the OMP. Revisions may be required if IDEM, OAM finds that the plan:
    - (A) Does not address a malfunction or period of excess emissions that has occurred;
    - (B) Fails to provide for the operation of the tanks, air pollution control techniques (i.e., the fume suppressant, the packed-bed scrubber), or process monitoring equipment during a malfunction in a manner consistent with good air pollution control practices; or
    - (C) Does not provide adequate procedures for correcting malfunctioning process equipment, air pollution control techniques, or monitoring equipment as quickly as practicable.

#### D.1.7 Record Keeping Requirements [326 IAC 2-6.1-5(a)(2)] [40 CFR 63.346]

The Permittee shall maintain records to document compliance with Conditions D.1.2 and D.1.4 using the forms provided with this permit. These records shall be maintained in accordance with Section C - General Record Keeping Requirements of this permit and include a minimum of the following:

(a) Inspection records for the fume suppressant, the packed-bed scrubber system and monitoring equipment to document that the inspection and maintenance required by Conditions D.1.5 and D.1.6 have taken place. The record can take the form of a checklist and should identify the following:

- (1) The device inspected;
- (2) The date of inspection;
- (3) A brief description of the working condition of the device during the inspection, including any deficiencies found; and
- (4) Any actions taken to correct deficiencies found during the inspection, including the date(s) such actions were taken.
- (b) Records of all maintenance performed on tanks T27 and T23, the packed-bed scrubber and monitoring equipment.
- (c) Records of the occurrence, duration, and cause (if known) of each malfunction or period of excess emissions of the tanks, the fume suppressant, the packed-bed scrubber and monitoring equipment as indicated by monitoring data collected in accordance with this condition. Records of the occurrence, duration, and cause (if known) of each malfunction of tanks T27 and T23, the fume suppressant, the packed-bed scrubber, monitoring equipment.
- (d) Records of the occurrence, duration, and cause (if known) of each period of excess emissions of tanks T27 and T23, the fume suppressant, the packed-bed scrubber, and monitoring equipment as indicated by monitoring data collected in accordance with this condition.
- (e) Records of actions taken during periods of malfunction or excess emissions when such actions are inconsistent with the OMP.
- (f) Other records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the OMP.
- (g) Test reports documenting results of all performance tests.
- (h) All measurements as may be necessary to determine the conditions of performance tests, including measurements necessary to determine compliance.
- (i) Records of monitoring data required by 40 CFR 63.343(c) that are used to demonstrate compliance with the standard including the date and time the data are collected.
- (j) The total process operating time, as defined in Condition D.1.6(b), of each tank, during the reporting period.
- (k) Records of the date and time that fume suppressants were added to the electroplating bath, and the amount and type of fume suppressants added.
- (I) Any information demonstrating whether a source is meeting the requirements for a waiver of record keeping or reporting requirements.
- (m) All documentation supporting the notifications and reports required by 40 CFR 63.9 and 63.10 (Subpart A, General Provisions) and by Condition D.1.8.

D.1.8 Reporting Requirements [326 IAC 2-6.1-5(a)(2)] [40 CFR 63.344(a)] [40 CFR 63.345] [40 CFR & 63.347]

The notifications and reports required in this section shall be submitted to **IDEM**, **OAM using** the address specified in Section C - General Reporting Requirements.

- (a) Notifications:
  - (1) Initial Notifications
    The Permittee shall notify IDEM, OAM in writing that the source is subject to
    40 CFR Part 63, Subpart N. The initial notification for tanks T27 and T23 has been submitted to IDEM, OAM.
  - (2) A notification of compliance status is required each time that the decorative chromium electroplating operation becomes subject to the requirements of 40 CFR Part 63 Subpart N. A Notification of Compliance Status (NCS) is required each time that the facility becomes subject to the requirements of 40 CFR Part 63 Subpart N.
    - (A) The notification of compliance status shall be submitted to IDEM, OAM, and shall list, for each tank, the information identified in 40 CFR 63.347(e)(i) through (ix). The NCS shall be submitted to IDEM, OAM, and shall list, for each tank, the information identified in 40 CFR 63.347(e)(2).
    - (B) For sources required to conduct a performance test, the notification of compliance status shall be submitted to IDEM, OAM no later than 90 calendar days following completion of the compliance demonstration.
    - (C) For sources that are not required to complete a performance test, the notification of compliance status shall be submitted to IDEM, OAM no later than 30 days after the startup date. The NCS for tanks T27 and T23 has been submitted to IDEM, OAM.
    - (D) For existing sources that are not required to complete additional performance testing, but have not yet submitted the Notification of Compliance Status (NCS), the notification of compliance status shall be submitted to IDEM, OAM immediately.
  - (3) In accordance with 40 CFR 63.345, a notification must be submitted to IDEM, OAM prior to any change, modification, or reconstruction of tanks T27 and T23 including the addition of any air pollution control techniques or add-on control devices or the construction of new chromium electroplating or chromic acid anodizing tanks as defined in 40 CFR 63.344(e). Notification of Construction or Reconstruction Pursuant to 40 CFR 63.345(b)(1), the Permittee may not construct a new tank subject to 40 CFR 63, Subpart N (including non-affected tanks defined in 40 CFR 63.344(e)) without submitting a Notification of Construction or Reconstruction (NCR) to IDEM, OAM. In addition, the Permittee may not change, modify, or reconstruct tanks T27 and T23 without submitting a Notification of Construction or Reconstruction (NCR) to IDEM, OAM.
    - (A) Notification shall be submitted as soon as practicable, but no earlier than thirty (30) days before the date construction or reconstruction commences.

      The NCR shall contain the information identified in 40 CFR 63.345(b) (2) and (3).

- (i) The application to construct chromium electroplating or chromic acid anodizing tanks or reconstruct tanks T27 and T23 serves as this notification.
- (ii) Pursuant to 326 IAC 2-1.1-2(a), permission must be received from IDEM, OAM before construction or reconstruction may commence.
- (B) A notification of the date when construction or reconstruction was commenced shall be submitted to IDEM, OAM no later than thirty (30) calendar days after such date. A change, modification, or reconstruction of this facility includes any change in the air pollution control techniques, the addition of add-on control devices, or the construction of duct work for the purpose of controlling both existing tanks and non-affected facilities by a common control technique or device.
- (C) A notification of the actual date of startup of the new or reconstructed chromium electroplating or chromic acid anodizing tanks shall be submitted to IDEM, OAM within thirty (30) calendar days after such date. A complete application to construct new chromium electroplating or chromium anodizing tanks serves as this notification. Likewise, the complete application to modify or reconstruct tanks T27 and T23 serves as this notification.
- (D) Pursuant to 326 IAC 2-1.1-2(a), permission must be received from IDEM, OAM before construction, modification, or reconstruction may commence.

Additional notifications required under 40 CFR 63.345 and 63.347 shall be specified as they become due.

#### (b) Performance Test Results

Pursuant to 40 CFR 63.344(a), results from any future performance tests shall be documented in a complete test report that contains the information required in 40 CFR 344(a) items (1) through (9). The Permittee shall document results from any future performance tests in a complete test report that contains the information required in 40 CFR 344(a).

Pursuant to 326 IAC 3-6-4(b) and 40 CFR 63.347(f)(2), reports of performance test results shall be submitted no later than forty-five (45) days following the completion of the performance test, and shall be submitted as part of a notification of compliance status as described in 40 CFR 63.347(e), to the address listed in Section C - Performance Testing. The Permittee shall submit reports of performance test results as part of the Notification of Compliance Status, described in 40 CFR 63.347(e), no later than forty-five (45) days following the completion of the performance test.

#### (c) Ongoing Compliance Status Report

The Permittee shall submit prepare summary reports to document the ongoing compliance status of tanks T27 and T23 using the Ongoing Compliance Status Report form provided with this permit. This report shall contain the applicable information specified in 40 CFR 63.347 (g)(3).

Because tanks T27 and T23 are located at site that is an area source of hazardous air pollutants (HAPs), the Ongoing Compliance Status Report shall be retained on site and made available to IDEM, OAM upon request.

- (1) The Ongoing Compliance Status Report shall be completed according to the following schedule except as provided in paragraphs (c)(2).
  - (A) The first report shall cover the period from the start-up date of the emissions units to December 31 of the year in which the emissions units begin operation.
  - (B) Following the first year of reporting, the report shall be completed on a calendar year basis with the reporting period covering from January 1 to December 31.
- (2) If either of the following conditions are met, semiannual reports shall be prepared and submitted to IDEM, OAM:
  - (A) The total duration of excess emissions (as indicated by the monitoring data collected by the Permittee in accordance with 40 CFR 63.343(c)) is one percent (1%) or greater of the total operating time as defined in Condition D.1.6(b) for the reporting period; or
  - (B) The total duration of malfunctions of the add-on air pollution control device and monitoring equipment is five percent (5%) or greater of the total operating time as defined in Condition D.1.6(b).

Once the Permittee reports an exceedance as defined above, Ongoing Compliance Status Reports shall be submitted semiannually until a request to reduce reporting frequency is approved.

(3) IDEM, OAM may determine on a case-by-case basis that the summary report shall be completed more frequently and submitted, or that the annual report shall be submitted instead of being retained on site, if these measures are necessary to accurately assess the compliance status of the source.

#### D.7.1 General Provisions Relating to HAPs [326 IAC 20-1-1] [40 CFR Part 63, Subpart A]

The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-1-1, apply to tank T21 the facility described in this section except when otherwise specified in 40 CFR 63 Subpart N.

D.7.2 Chromium Electroplating NESHAP [326 IAC 20-8-1] [40 CFR 63.342(c)&(f)] [40 CFR 63.343(a) (1)&(2)]

Tank T21 is subject to 40 CFR Part 63, Subpart N, which is incorporated by reference as 326 IAC 20-8-1. A copy of this rule is attached.

- (a) The emission limitations in this condition apply only during tank operation, and also apply during periods of startup and shutdown as these are routine occurrences for tanks subject to 326 IAC 20-8-1. The emission limitations do not apply during periods of malfunction or excess emissions, but the work practice standards that address operation and maintenance are required by this section and must be followed during malfunctions and periods of excess emissions.
- (b) During tank operation, the Permittee shall control chromium emissions discharged to the atmosphere from each tank by using a chemical fume suppressant containing a wetting agent and not allowing the surface tension of the electroplating baths contained within the tank to exceed forty-five (45) dynes per centimeter (dynes/cm) (3.1 x 10-3 pound-force per foot [lbf/ft]) at any time during operation of the tank.
- (c) The following work practice standards for the tank are also applicable:

- (1) At all times, including periods of startup, shutdown, malfunction and excess emissions, the Permittee shall operate and maintain the tank, the fume suppressant, the packed-bed scrubber, and monitoring equipment in a manner consistent with good air pollution control practices, consistent with the Operation and Maintenance Plan (OMP) required by Condition D.7.4.
- (2) Malfunctions and excess emissions shall be corrected as soon as practicable after their occurrence in accordance with the OMP required by Condition D.7.4.
- (3) These operation and maintenance requirements are enforceable independent of emissions limitations or other requirements in this section.
- (4) Determination of whether acceptable operation and maintenance procedures are being used will be based on the information available to IDEM, OAM, which may include, but is not limited to, monitoring results; review of the OMP, procedures and records; and inspection of the source.
- (5) Based on the results of the determination made under Condition D.7.2(c)(3) above, IDEM, OAM may require that the Permittee make changes to the OMP. Revisions may be required if IDEM, OAM finds that the plan:
  - (A) Does not address a malfunction or period of excess emissions that has occurred:
  - (B) Fails to provide for the operation of the tank, air pollution control techniques (i.e., the fume suppressant, the packed-bed scrubber), or process monitoring equipment during a malfunction in a manner consistent with good air pollution control practices; or
  - (C) Does not provide adequate procedures for correcting malfunctioning process equipment, air pollution control techniques, or monitoring equipment as quickly as practicable.
- D.7.7 Record Keeping Requirements [326 IAC 2-5.1-3(e)(2)] [ 326 IAC 2-6.1-5(a)(2)] [40 CFR 63.346]

  The Permittee shall maintain records to document compliance with Conditions D.7.2 and D.7.4 using the forms provided with this permit. These records shall be maintained in accordance with Section C General Record Keeping Requirements of this permit and include a minimum of the following:
  - (a) Inspection records for the fume suppressant, the packed-bed scrubber system and monitoring equipment to document that the inspection and maintenance required by Conditions D.7.5 and D.7.6 have taken place. The record can take the form of a checklist and should identify the following:

- (1) The device inspected;
- (2) The date of inspection;
- (3) A brief description of the working condition of the device during the inspection, including any deficiencies found; and
- (4) Any actions taken to correct deficiencies found during the inspection, including the date(s) such actions were taken.
- (b) Records of all maintenance performed on tank T21, the fume suppressant, the packed-bed scrubber and monitoring equipment.
- (c) Records of the occurrence, duration, and cause (if known) of each malfunction or period of excess emissions of the tanks, the fume suppressant, the packed-bed scrubber and monitoring equipment as indicated by monitoring data collected in accordance with this condition. Records of the occurrence, duration, and cause (if known) of each malfunction of tank T21, the fume suppressant, the packed-bed scrubber, monitoring equipment.
- (d) Records of the occurrence, duration, and cause (if known) of each period of excess emissions of tank T21, the fume suppressant, the packed-bed scrubber, and monitoring equipment as indicated by monitoring data collected in accordance with this condition.
- (e) Records of actions taken during periods of malfunction or excess emissions when such actions are inconsistent with the OMP.
- (f) Other records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the OMP.
- (g) Test reports documenting results of all performance tests.
- (h) All measurements as may be necessary to determine the conditions of performance tests, including measurements necessary to determine compliance.
- (i) Records of monitoring data required by 40 CFR 63.343(c) that are used to demonstrate compliance with the standard including the date and time the data are collected.
- (j) The total process operating time, as defined in Condition D.7.6(b), of the tank, during the reporting period.
- (k) Records of the date and time that fume suppressants were added to the electroplating bath, and the amount and type of fume suppressants added.
- (I) Any information demonstrating whether a source is meeting the requirements for a waiver of record keeping or reporting requirements.
- (m) All documentation supporting the notifications and reports required by 40 CFR 63.9 and 63.10 (Subpart A, General Provisions) and by Condition D.7.8.

D.7.8 Record Keeping Requirements [326 IAC 2-5.1-3(e)(2)] [ 326 IAC 2-6.1-5(a)(2)] [40 CFR 63.344(a)] [40 CFR 63.345] [40 CFR 63.347]

The notifications and reports required in this section shall be submitted to **IDEM**, **OAM using** the address specified in Section C - General Reporting Requirements.

- (a) Notifications:
  - (1) A notification of the actual date of startup of tank T21 shall be submitted within 30 calendar days after such date. Initial Notifications

    The Permittee shall submit an Initial Notification for tank T21 as follows:
    - (A) A notification of the actual date when construction of tank T21 commenced shall be submitted no later than thirty (30) days after such date.
    - (B) A notification of the actual date of startup of tank T21 shall be submitted within thirty (30) days after such date.
  - (2) A notification of compliance status is required each time that the decorative chromium electroplating operation becomes subject to the requirements of 40 CFR Part 63 Subpart N. A Notification of Compliance Status (NCS) is required each time that the facility becomes subject to the requirements of 40 CFR Part 63 Subpart N.
    - (A) The notification of compliance status shall be submitted to IDEM, OAM, and shall list, for each tank, the information identified in 40 CFR 63.347(e)(i) through (ix). The NCS shall be submitted to IDEM, OAM, and shall list, for each tank, the information identified in 40 CFR 63.347(e)(2).
    - (B) For sources required to conduct a performance test, the notification of compliance status shall be submitted to IDEM, OAM no later than 90 calendar days following completion of the compliance demonstration.
    - (C) For sources that are not required to complete a performance test, the notification of compliance status shall be submitted to IDEM, OAM no later than 30 days after the startup date. The NCS for tank T21 shall be submitted to IDEM, OAM no later than 30 days after the startup date.
    - (D) For existing sources that are not required to complete additional performance testing, but have not yet submitted the Notification of Compliance Status (NCS), the notification of compliance status shall be submitted to IDEM, OAM immediately.
  - (3) In accordance with 40 CFR 63.345, a notification must be submitted to IDEM, OAM prior to any change, modification, or reconstruction of tank T21 including the addition of any air pollution control techniques or add-on control devices or the construction of new chromium electroplating or chromic acid anodizing tanks as defined in 40 CFR 63.344(e). Notification of Construction or Reconstruction Pursuant to 40 CFR 63.345(b)(1), the Permittee may not construct a new tank subject to 40 CFR 63, Subpart N (including non-affected tanks defined in 40 CFR 63.344(e)) without submitting a Notification of Construction or Reconstruction (NCR) to IDEM, OAM. In addition, the Permittee may not change, modify, or reconstruct tank T21 without submitting an NCR to IDEM, OAM.
    - (A) Notification shall be submitted as soon as practicable, but no earlier than

thirty (30) days before the date construction or reconstruction commences. The NCR shall contain the information identified in 40 CFR 63.345(b) (2) and (3).

- (i) The application to construct chromium electroplating or chromic acid anodizing tanks or reconstruct tank T21 serves as this notification.
- (ii) Pursuant to 326 IAC 2-1.1-2(a), permission must be received from IDEM, OAM before construction or reconstruction may commence.
- (B) A notification of the date when construction or reconstruction was commenced shall be submitted to IDEM, OAM no later than thirty (30) calendar days after such date. A change, modification, or reconstruction of this facility includes any change in the air pollution control techniques, the addition of add-on control devices, or the construction of duct work for the purpose of controlling both existing tanks and non-affected facilities by a common control technique or device.
- (C) A notification of the actual date of startup of the new or reconstructed chromium electroplating or chromic acid anodizing tanks shall be submitted to IDEM, OAM within thirty (30) calendar days after such date. A complete application to construct new chromium electroplating or chromium anodizing tanks serves as this notification. Likewise, the complete application to modify or reconstruct tank T21 serves as this notification.
- (D) Pursuant to 326 IAC 2-1.1-2(a), permission must be received from IDEM, OAM before construction, modification, or reconstruction may commence.

Additional notifications required under 40 CFR 63.345 and 63.347 shall be specified as they become due.

#### (b) Performance Test Results

63.347(g)(3).

Pursuant to 40 CFR 63.344(a), results from any future performance tests shall be documented in a complete test report that contains the information required in 40 CFR 344(a) items (1) through (9).—The Permittee shall document results from the initial performance test and any future performance tests in a complete test report that contains the information required in 40 CFR 344(a).

Pursuant to 326 IAC 3-6-4(b) and 40 CFR 63.347(f)(2), reports of performance test results shall be submitted no later than forty-five (45) days following the completion of the performance test, and shall be submitted as part of a notification of compliance status as described in 40 CFR 63.347(e), to the address listed in Section C - Performance Testing. The Permittee shall submit reports of performance test results as part of the Notification of Compliance Status, described in 40 CFR 63.347(e), no later than forty-five (45) days following the completion of the performance test.

(c) Ongoing Compliance Status Report
The Permittee shall submit prepare summary reports to document the ongoing compliance status of tank T21 using the Ongoing Compliance Status Report form provided with this permit. This report shall contain the applicable information specified in 40 CFR

Because tank T21 are is located at site that is an area source of hazardous air pollutants (HAPs), the Ongoing Compliance Status Report shall be retained on site and made available to IDEM, OAM upon request.

- (1) The Ongoing Compliance Status Report shall be completed according to the following schedule except as provided in paragraphs (c)(2).
  - (A) The first report shall cover the period from the start-up date of the emissions units to December 31 of the year in which the emissions units begin operation.
  - (B) Following the first year of reporting, the report shall be completed on a calendar year basis with the reporting period covering from January 1 to December 31.
- (2) If either of the following conditions are met, semiannual reports shall be prepared and submitted to IDEM, OAM:
  - (A) The total duration of excess emissions (as indicated by the monitoring data collected by the Permittee in accordance with 40 CFR 63.343(c)) is one percent (1%) or greater of the total operating time as defined in Condition D.7.6(b) for the reporting period; or
  - (B) The total duration of malfunctions of the add-on air pollution control device and monitoring equipment is five percent (5%) or greater of the total operating time as defined in Condition D.7.6(b).

Once the Permittee reports an exceedance as defined above, Ongoing Compliance Status Reports shall be submitted semiannually until a request to reduce reporting frequency is approved.

(3) IDEM, OAM may determine on a case-by-case basis that the summary report shall be completed more frequently and submitted, or that the annual report shall be submitted instead of being retained on site, if these measures are necessary to accurately assess the compliance status of the source.

#### D.6.2 Stack Height and Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 1-7] [326 IAC 7]

The requirements from Conditions 2, 3, 4 and 5 of PC (16) 1815, issued on January 5, 1990, are no longer applicable because the one (1) boiler, identified as 1513, is no longer capable of burning no. 2 fuel oil. Those conditions which required that although 326 IAC 1-7-3 does not apply, the minimum stack height shall be limited to 50 feet, the sulfur content in the number 2 fuel oil shall be limited to 0.5 percent by weight, pursuant to 326 IAC 7-1-2, sulfur dioxide emissions shall be emitted at less than 6 pounds per million Btu input, and reports of the calendar month or annual average sulfur content, heat content, fuel consumption and sulfur dioxide emission rate in pounds per million Btu shall be submitted upon request pursuant to 326 IAC 7-1-3—are not applicable because one (1) boiler, identified as 1513 shall not use no. 2 fuel oil. Therefore, the requirements of 326 IAC 1-7 and 326 IAC 7 are not applicable to these boilers.

#### D.6.3 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for these emissions units.

#### Compliance Determination Requirement [326 IAC 2-1.1-11]

require compliance testing when necessary to determine if the emissions units are in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.6.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

#### Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]

#### 

#### Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]

#### D.6.64 Record Keeping Requirements [40CFR 60.48c, NSPS Subpart Dc]

- (a) The Permittee shall maintain daily records of the amount and type of fuel burned in the two (2) boilers pursuant to 40 CFR 60.48c, Subpart Dc.
- (b) To document compliance with Condition D.6.5, the Permittee shall maintain records of visible emission notations of the boiler stacks exhaust once per shift.
- (c)(b) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

#### D.6.75 Natural Gas Fired Boiler Certification

An annual certification shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the Natural Gas Fired Boiler Certification form located at the end of this permit, or its equivalent, no later than July 1 of each year.

#### Appendix A: Emissions Calculations Natural Gas Combustion Only MM BTU/HR <100

Company Name: Delta Faucet Company
Address, City IN Zip: 1425 West Main Street, Greensburg, IN 47240

MSOP: 031-11706 PIt ID: 031-00007 CarrieAnn Ortolani Reviewer: Date: December 27, 1999

Boiler 1513

Potential Throughput Heat Input Capacity MMBtu/hr MMCF/yr

32.94 288.55

Pollutant									
	PM*	PM10*	SO2	NOx	VOC	CO			
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0	5.5	84.0			
				**see below					
Potential Emission in tons/yr	0.274	1.10	0.087	14.4	0.794	12.1			

<sup>\*</sup>PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

Boiler 586

Heat Input Capacity Potential Throughput MMBtu/hr MMCF/yr 25.20 220.75

Polluta PM10\* PM' SO2 VOC CO Emission Factor in lb/MMCF 1.9 7.6 0.6 100.0 5.5 84.0 \*see below 0.210 11.0 0.607 Potential Emission in tons/yr 0.839 0.066 9.27

Boiler 2256

Potential Throughput Heat Input Capacity MMBtu/hr MMCF/yr 14.70 128.77

	PM*	PM10*	SO2	NOx	VOC	co
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.122	0.489	0.039	6.44	0.354	5.41

<sup>\*</sup>PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

Boiler 1854

Potential Throughput Heat Input Capacity MMBtu/hr 2.10 18.40

Pollutant									
	PM*	PM10*	SO2	NOx	VOC	CO			
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0	5.5	84.0			
				**see below					
Potential Emission in tons/yr	0.017	0.070	0.006	0.920	0.051	0.773			

Boilers 1307 and 1308

Heat Input Capacity Potential Throughput MMBtu/hr MMCF/yr

1.50 13.14

Pollutant									
	PM*	PM10*	SO2	NOx	VOC	СО			
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0	5.5	84.0			
				**see below					
Potential Emission in tons/yr	0.012	0.050	0.004	0.657	0.036	0.552			

<sup>\*</sup>PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined. \*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

#### Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03

(SUPPLEMENT D 3/98)

(SOFFLEMENT 0 3/95)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included/).

See page 2 for HAPs emissions calculations.

<sup>\*\*</sup>Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

<sup>\*\*</sup>Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

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Appendix A: Emissions Calculations Natural Gas Combustion Only MM BTU/HR <100 Small Industrial Bollers HAPs Emissions

Company Name: Delta Faucet Company
Address, City IN Zip: 1425 West Main Street, Greensburg, IN 47240
MSOP: 031-11706
Pit ID: 031-00007
Reviewer: CarrieAnn Ortolani
Date: December 27, 1999

#### HAPs - Organics

Emission Factor in lb/MMcf	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	7.031E-04	4.018E-04	2.511E-02	6.027E-01	1.138E-03

HAPs - Meta
Codmium

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	1.674E-04	3.683E-04	4.687E-04	1.272E-04	7.031E-04

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above. Additional HAPs emission factors are available in AP-42, Chapter 1.4.

## Appendix A: Emissions Calculations Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr) #1 and #2 Fuel Oil

Company Name: Delta Faucet Company

Address, City IN Zip: 1425 West Main Street, Greensburg, IN 47240

MSOP: 031-11706 Plt ID: 031-00007

Reviewer: CarrieAnn Ortolani Date: December 27, 1999

#### Boiler 586 (Backup Fuel)

Heat Input Capacity Potential Throughput S = Weight % Sulfur MMBtu/hr kgals/year 0.5

25.20 1576.8

	Pollutant						
	PM*	SO2	NOx	VOC	CO		
Emission Factor in lb/kgal	2.0	71.0	20.0	0.34	5.0		
		(142.0S)					
Potential Emission in tons/yr	1.58	56.0	15.8	0.268	3.94		

#### Methodology

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Bi

Emission Factors are from AP 42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-03-005-01/02/03) Supplement E 9/98 (see erata file) \*PM emission factor is filterable PM only. Condensable PM emission factor is 1.3 lb/kgal.

Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 4 for HAPs emission calculations.

#### Page 4 of 9 TSD App A

# Appendix A: Emissions Calculations Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr) #1 and #2 Fuel Oil HAPs Emissions

Company Name: Delta Faucet Company

Address, City IN Zip: 1425 West Main Street, Greensburg, IN 47240

MSOP: 031-11706 Plt ID: 031-00007

Reviewer: CarrieAnn Ortolani
Date: December 27, 1999

#### HAPs - Metals

Emission Factor in lb/mmBtu	Arsenic	Beryllium	Cadmium	Chromium	Lead
	4.0E-06	3.0E-06	3.0E-06	3.0E-06	9.0E-06
Potential Emission in tons/yr	4.42E-04	3.31E-04	3.31E-04	3.31E-04	9.93E-04

#### HAPs - Metals (continued)

Emission Factor in lb/mmBtu	Mercury	Manganese	Nickel	Selenium
	3.0E-06	6.0E-06	3.0E-06	1.5E-05
Potential Emission in tons/yr	3.31E-04	6.62E-04	3.31E-04	1.66E-03

#### Methodology

No data was available in AP-42 for organic HAPs.

Potential Emissions (tons/year) = Throughput (mmBtu/hr)\*Emission Factor (lb/mmBtu)\*8,760 hrs/yr / 2,000 lb/ton

# Appendix A: Emissions Calculations Natural Gas Combustion Only MM BTU/HR <100 Brazing and Cure Oven

Company Name: Delta Faucet Company

Address, City IN Zip: 1425 West Main Street, Greensburg, IN 47240

MSOP: 031-11706 Plt ID: 031-00007

Reviewer: CarrieAnn Ortolani Date: December 27, 1999

Heat Input Capacity Potential Throughput

MMBtu/hr MMCF/yr

9.32 81.64

#### Pollutant

	PM*	PM10*	SO2	NOx	VOC	СО
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.078	0.310	0.024	4.08	0.225	3.43

<sup>\*</sup>PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

#### Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 6 for HAPs emissions calculations.

<sup>\*\*</sup>Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

# Appendix A: Emissions Calculations Natural Gas Combustion Only MM BTU/HR <100 Small Industrial Boiler HAPs Emissions

Company Name: Delta Faucet Company

Address, City IN Zip: 1425 West Main Street, Greensburg, IN 47240

MSOP: 031-11706 PIt ID: 031-00007

Reviewer: CarrieAnn Ortolani
Date: December 27, 1999

HAPs - Organics

Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	8.573E-05	4.899E-05	3.062E-03	7.348E-02	1.388E-04

#### HAPs - Metals

Emission Factor in lb/MMcf	Lead	Cadmium	Chromium	Manganese	Nickel
	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	2.041E-05	4.490E-05	5.715E-05	1.551E-05	8.573E-05

Methodology is the same as page 5.

The five highest organic and metal HAPs emission factors are provided above. Additional HAPs emission factors are available in AP-42, Chapter 1.4.

#### Appendix A: Emission Calculations Process Operations

Company Name: Delta Faucet Company

Address City IN Zip: 1425 West Main Street, Greensburg, Indiana 47240

MSOP: 031-11706 Plt ID: 031-00007 Reviewer: CarrieAnn Ortolani

Date: December 27, 1999

Emission Unit	Stack	Flow Rate (acfm)	Outlet Grain Loading (gr/acfm)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)	Control Efficiency	Potential Emissions (lbs/hr)	Potential Emissions (tons/yr)	Process Weight Rate (lbs/hr)	Allowable Emissions (lbs/hr)
Buffing Air Washer	2126	42961	9.40E-07	3.46E-04	1.52E-03	95.0%	6.92E-03	3.03E-02		
Buffing Air Washer	2491	27752	9.81E-07	2.33E-04	1.02E-03	95.0%	4.67E-03	2.04E-02		
Buffing Air Washer	3011	48000	1.01E-06	4.16E-04	1.82E-03	95.0%	8.31E-03	3.64E-02		
									less than	
				9.95E-04	4.36E-03		1.99E-02	8.72E-02	100	0.551

Emission Unit	Stack	Maximum Powder Use (lbs/hr)	Conservative Transfer Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)	Control Efficiency	Potential Emissions (lbs/hr)	Potential Emissions (tons/yr)
Powder Spray Booth	1421	20	65.0%	0.350	1.53	95.0%	7.00	30.7

#### Methodology

#### Buffing

Controlled Emissions (lbs/hr) = gr/acfm x acfm x 60 minutes/hr / 7000 gr/lb

Uncontrolled Emissions (lbs/hr) = Controlled Emissions (lbs/hr) / (1 - Control Efficiency)

Emissions (tons/yr) = Emissions (lbs/hr) \* 8760 hrs/yr / 2000 lbs/ton

Allowable Emissions (lbs/hr) = 4.10 x (Process weight (lbs/hr) / 2000 lbs/ton)^0.67 [326 IAC 6-3-2]

#### Powder Spray Booth

Uncontrolled Emissions (lbs/hr) = Powder usage rate \* (1- transfer efficiency)

Controlled Emissions (lbs/hr) = Uncontrolled Emissions (lbs/hr) \* (1 - Control Efficiency)

Emissions (tons/yr) = Emissions (lbs/hr) \* 8760 hrs/yr / 2000 lbs/ton

### Appendix A: Emissions Calculations Burn Off Oven

Company Name: Delta Faucet Company

Address, City IN Zip: 1425 West Main Street, Greensburg, IN 47240

MSOP: 031-11706 PIt ID: 031-00007

Reviewer: CarrieAnn Ortolani Date: December 27, 1999

#4 Fuel Oil

Heat Input Capacity Potential Throughput MMBtu/hr kgals/year

S = Weight % Sulfur 0.5

0.99

61.95

	Pollutant							
	PM	SO2	NOx	VOC	СО			
Emission Factor in lb/kgal	2.0	71	20.0	0.34	5.0			
		(142.0S)						
Potential Emission in tons/yr	0.062	2.20	0.619	0.011	0.155			

#### Methodology

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Btu

Emission Factors are from AP 42, Tables 1.3-2 and 1.3-4 (SCC 1-02-005-01/02/03)

Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

Emission Factor in lb/mmBtu	Arsenic	Beryllium	Cadmium	Chromium	Lead
	4.0E-06	3.0E-06	3.0E-06	3.0E-06	9.0E-06
Potential Emission in tons/yr	1.73E-05	1.30E-05	1.30E-05	1.30E-05	3.90E-05

#### HAPs - Metals (continued)

	11/11 3	Wictais (conti	naca)	
Emission Factor in lb/mmBtu	Mercury 3.0E-06	Manganese 6.0E-06	Nickel 3.0E-06	Selenium 1.5E-05
Potential Emission in tons/yr	1.30E-05	2.60E-05	1.30E-05	6.50E-05

#### Methodology

No data was available in AP-42 for organic HAPs.

 $Potential\ Emissions\ (tons/year) = Throughput\ (mmBtu/hr)*Emission\ Factor\ (lb/mmBtu)*8,760\ hrs/yr\ /\ 2,000\ lb/ton$ 

#### **Process Emissions**

	Potential	Potential	Potential	Control	Emissions	Emissions	Emissions
	Emissions	Emissions	Emissions	Efficiency of	after control	after control	after control
Pollutant	(lb/hr)	(lbs/day)	(tons/year)	Cyclone	(lb/hr)	(lbs/day)	(tons /year)
PM	1.95	46.8	8.54	96.08%	0.076	1.83	0.335
PM-10	1.95	46.8	8.54	96.08%	0.076	1.83	0.335

#### Methodology

Potential emissions (lb/hr) is submitted by the company.

Potential Emissions in lbs/day = emissions in lbs/hr \* 24 hrs/day

Potential emissions (tons/yr) = emissions in lbs/hr \* 8760 hrs/year\* 1 ton/2000 lbs

Emissions after controls = Potential emissions \* (1 - control efficiency)

<sup>1</sup> gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

## Appendix A: Emission Calculations Miscellaneous Operations

Company Name: Delta Faucet Company

Address City IN Zip: 1425 West Main Street, Greensburg, Indiana 47240

MSOP: 031-11706 PIt ID: 031-00007

Reviewer: CarrieAnn Ortolani Date: December 27, 1999

#### **VOC and HAP emissions**

Material	Unit ID	Usage	Potential Emissions	Potential Emissions	Control	Potential Emissions	Potential Emissions
			before Controls	before Controls	Efficiency	after Controls	after Controls
		(lbs/hr)	(lbs/hr)	(tons/yr)	(%)	(lbs/hr)	(tons/yr)
Formaldehyde	EC Tank T12/T13	0.123	0.123	0.539	99.0%	0.001	0.005
Methanol	Process Map T14	0.148	0.148	0.648	90.0%	0.015	0.065
			0.271	1.19		0.016	0.070

Small amounts of SO2 and NOx can result from those operations.

NOx emissions supplied by the applicant are 0.754 tons per year, and SOx emissions supplied by the applicant are 0.086 tons per year.